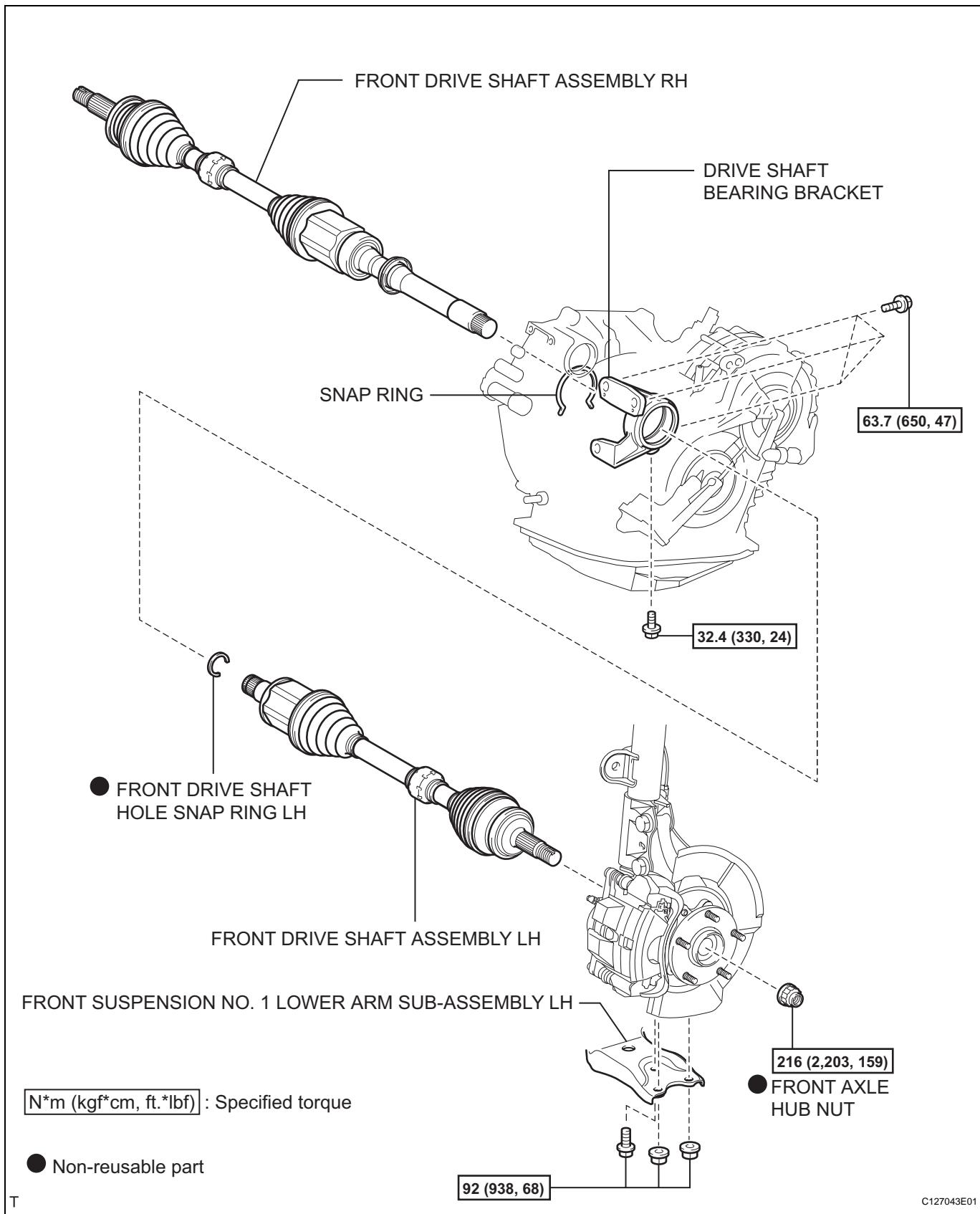


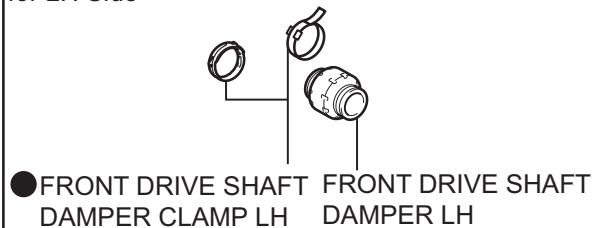
FRONT DRIVE SHAFT ASSEMBLY (for 4WD)

COMPONENTS

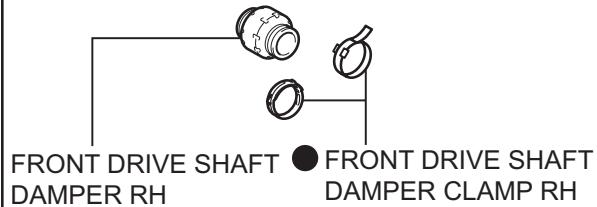
(2005/11-2006/01)



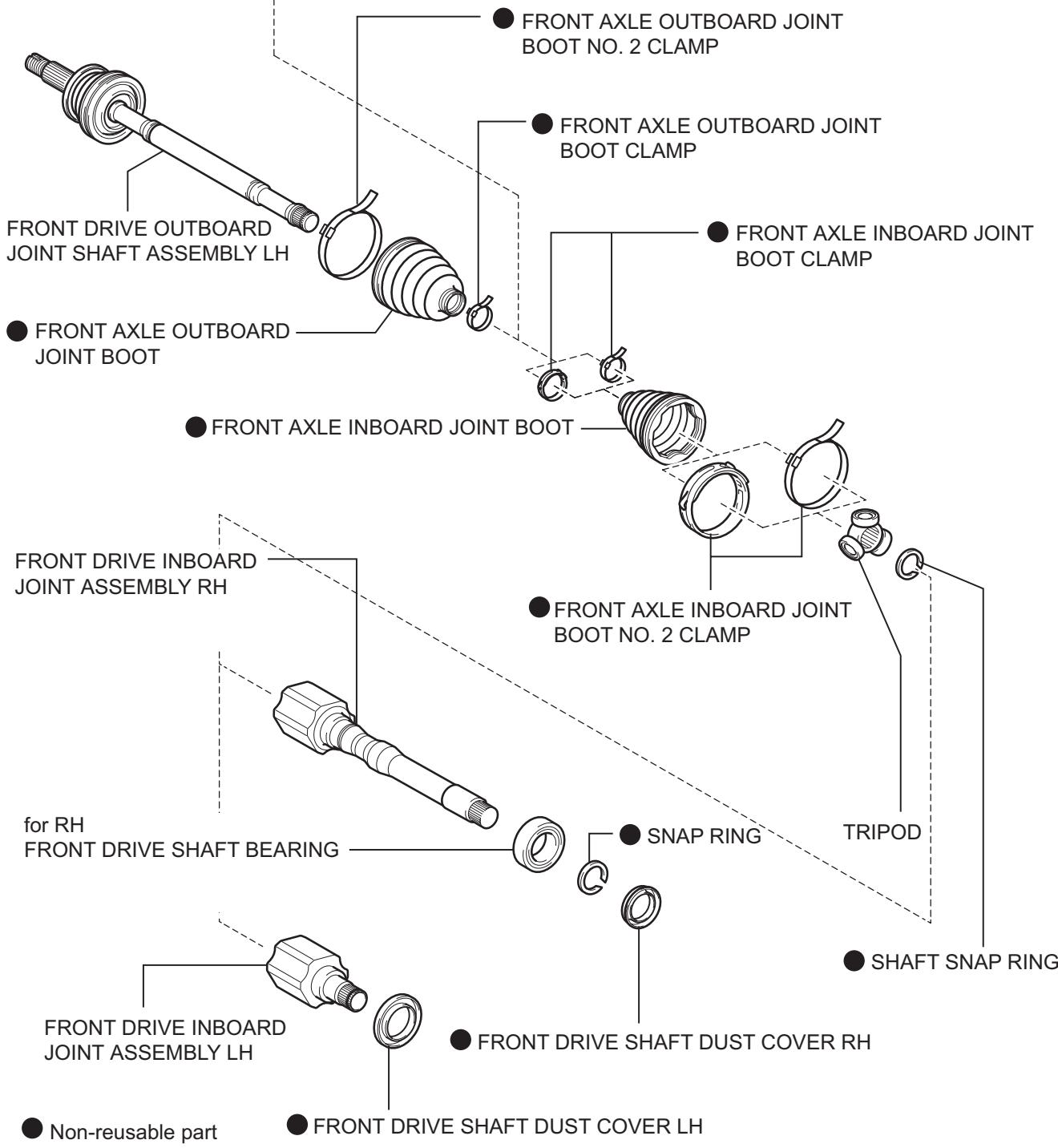
for LH Side



fro RH Side



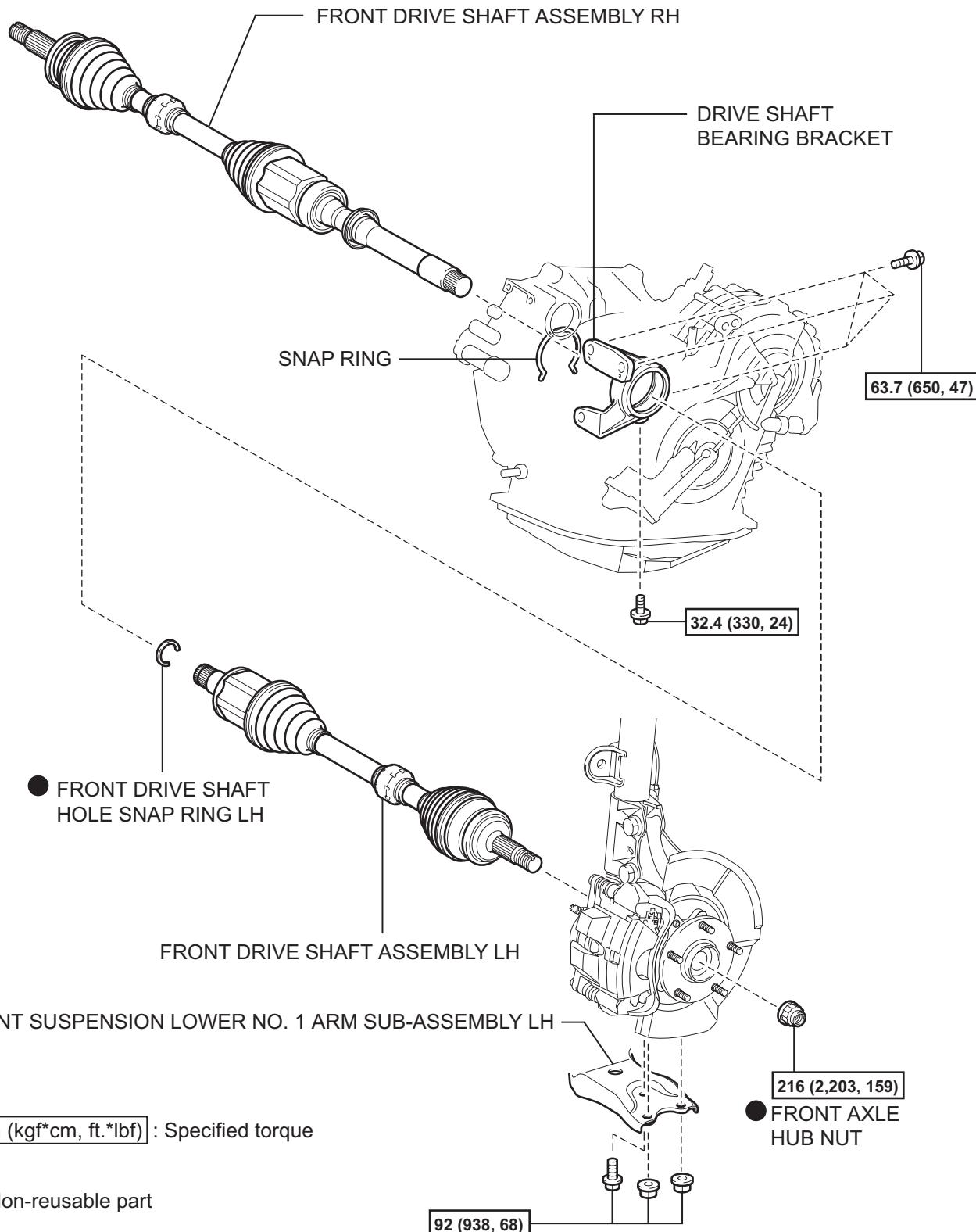
DS



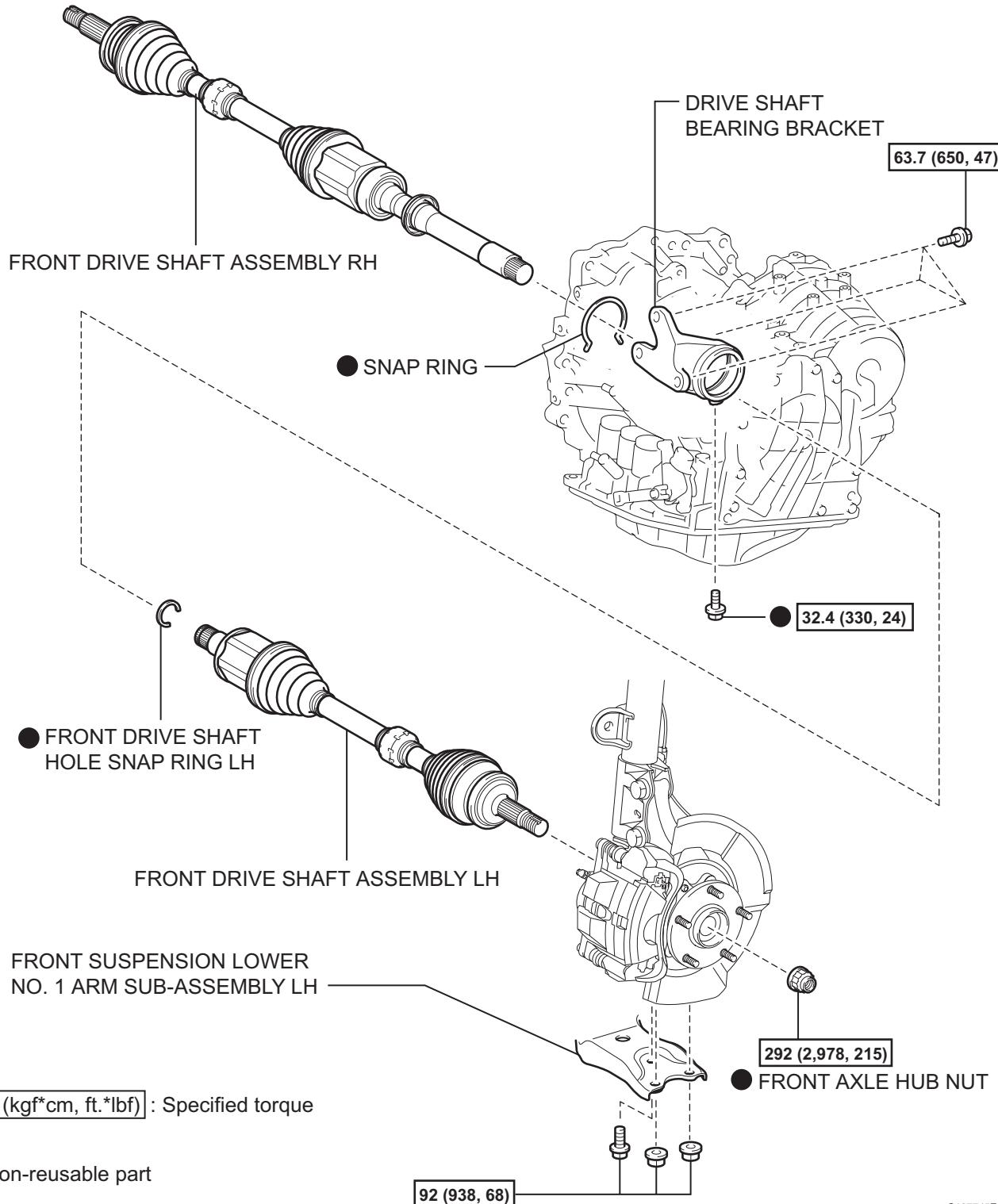
COMPONENTS

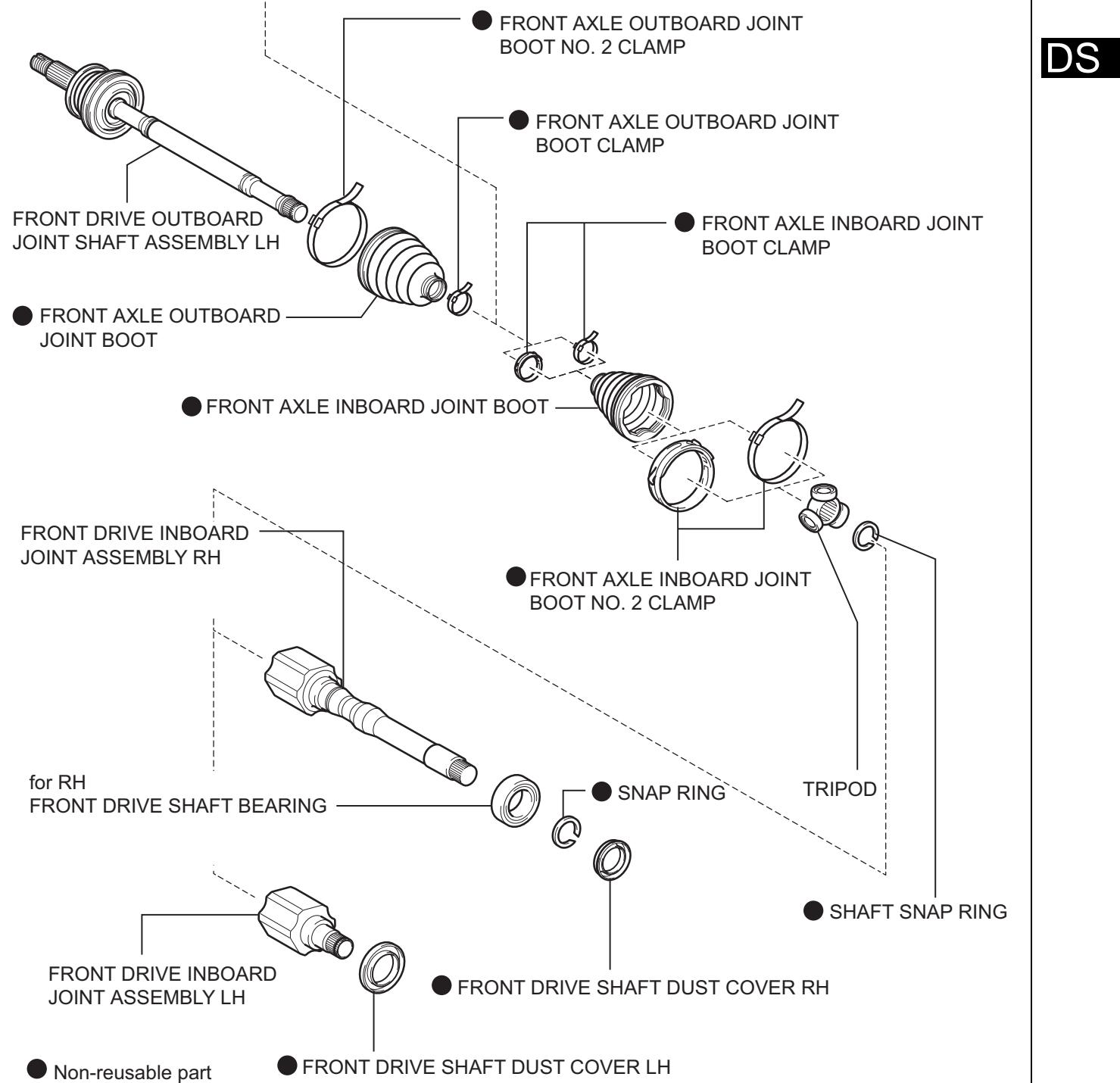
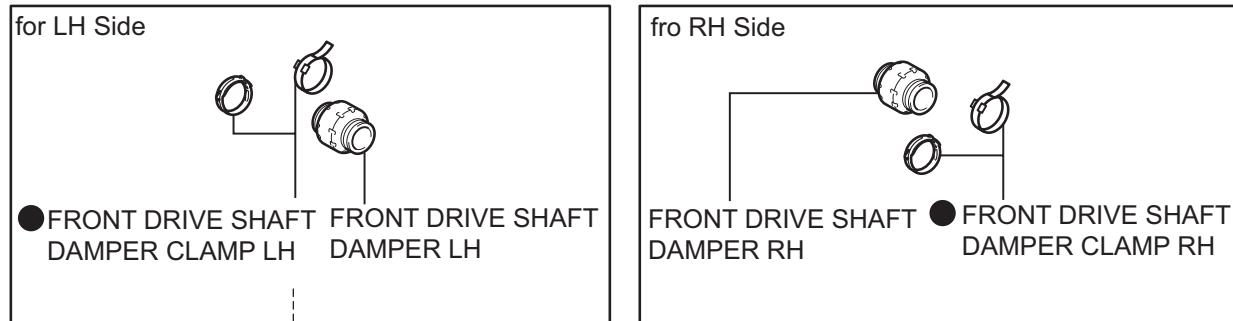
(2006/01-)

for 2AZ-FE



for 2GR-FE

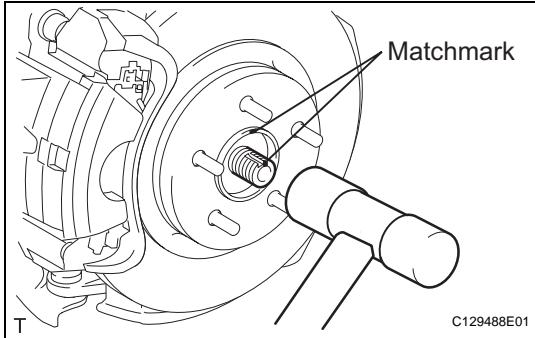




REMOVAL

(2005/11-2006/01)

- 1. REMOVE FRONT WHEEL**
- 2. DRAIN AUTOMATIC TRANSAXLE FLUID**
 - (a) Drain the automatic transaxle fluid for U140F (see page [AX-147](#)).
 - (b) Drain the automatic transaxle fluid for U241E (see page [AX-146](#)).
- 3. REMOVE FRONT AXLE HUB NUT (See page [AH-6](#))**
- 4. DISCONNECT FRONT SPEED SENSOR LH (See page [BC-191](#))**
- 5. DISCONNECT FRONT SPEED SENSOR RH**
HINT:
 Use the same procedures described for the LH side.
- 6. DISCONNECT FRONT DISC BRAKE CYLINDER ASSEMBLY LH (See page [BR-40](#))**
- 7. DISCONNECT FRONT DISC BRAKE CYLINDER ASSEMBLY RH**
HINT:
 Use the same procedures described for the LH side.
- 8. DISCONNECT FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-9](#))**
- 9. DISCONNECT FRONT STABILIZER LINK ASSEMBLY RH**
HINT:
 Use the same procedures described for the LH side.
- 10. DISCONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH (See page [AH-7](#))**
- 11. DISCONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY RH**
HINT:
 Use the same procedures described for the LH side.
- 12. DISCONNECT STEERING KNUCKLE WITH AXLE HUB LH**
 - (a) Put matchmarks on the drive shaft and axle hub.
NOTICE:
Do not punch the marks.
 - (b) Using a plastic-faced hammer, disconnect the steering knuckle with axle hub.
NOTICE:
Be careful not to damage the boot and speed sensor rotor.
 Do not excessively push out the drive shaft from the axle assembly.
- 13. DISCONNECT STEERING KNUCKLE WITH AXLE HUB RH**
HINT:
 Use the same procedures described for the LH side.



**14. DISCONNECT TIE ROD END SUB-ASSEMBLY LH
(See page PS-42)**

15. DISCONNECT TIE ROD END SUB-ASSEMBLY RH
HINT:
Use the same procedures described for the LH side.

16. REMOVE FRONT DRIVE SHAFT ASSEMBLY LH

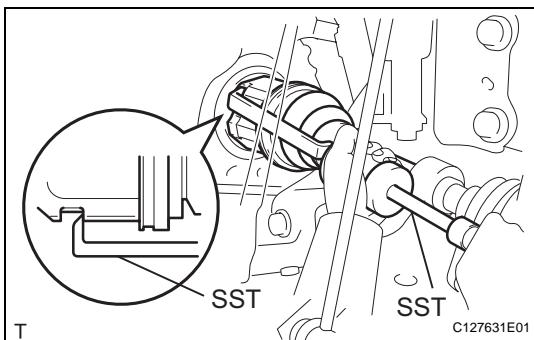
(a) Using SST, remove the front drive shaft.

SST 09520-01010, 09520-24010 (09520-32040)

NOTICE:

- Be careful not to damage the transaxle case oil seal, inboard joint boot and drive shaft dust cover.
- Be careful not to drop the drive shaft.

DS

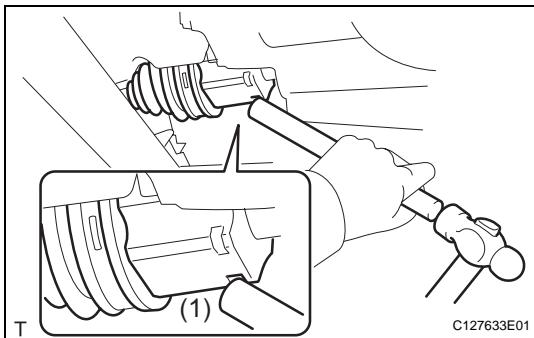


17. REMOVE FRONT DRIVE SHAFT ASSEMBLY RH

(a) Using a brass bar and hammer, set the brass bar against position (1) as shown in the illustration and remove the drive shaft.

NOTICE:

- Do not damage the oil seal.
- Do not damage the drive shaft boot.
- Do not allow the drive shaft to fall off.



(b) Squeeze the ends of the snap ring, and remove the snap ring from the bearing bracket.

(c) Remove the bearing bracket bolt and remove the front drive shaft from the bearing bracket.

NOTICE:

- Do not damage the oil seal.
- Do not damage the boot.
- Do not allow the drive shaft to fall off.

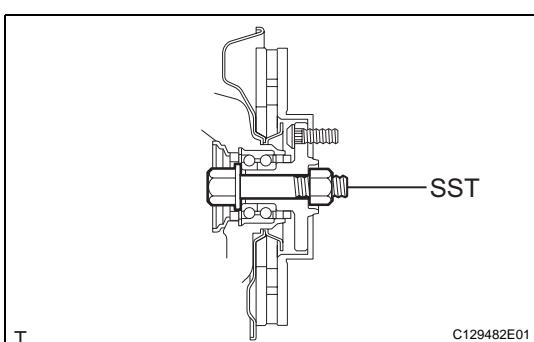
HINT:

If the connection is stiff, use a brass bar and hammer to lightly tap the edge of the inboard joint RH and remove it.

18. FIX FRONT AXLE ASSEMBLY

NOTICE:

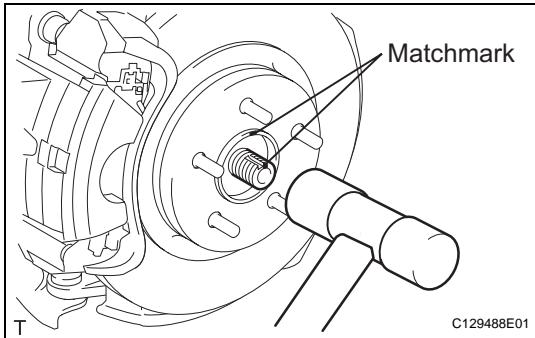
The hub bearing could be damaged if it is subjected to the vehicle weight, such as when moving the vehicle with the drive shaft removed. Therefore, if it is absolutely necessary to place the vehicle weight on the hub bearing, first support it with SST.
SST 09608-16042 (09608-02021, 09608-02041)



REMOVAL

(2006/01-)

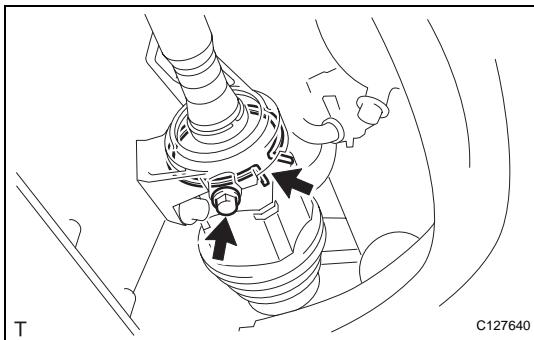
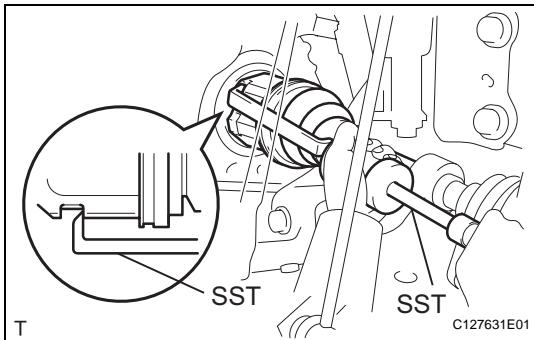
- 1. REMOVE FRONT WHEEL**
- 2. DRAIN AUTOMATIC TRANSAXLE FLUID**
 - (a) Drain the automatic transaxle fluid for U140F (see page [AX-147](#)).
 - (b) Drain the automatic transaxle fluid for U241E (see page [AX-146](#)).
 - (c) Drain the automatic transaxle fluid for U151F (see page [AX-173](#)).
- 3. REMOVE FRONT AXLE HUB NUT (See page [AH-8](#))**
- 4. DISCONNECT FRONT SPEED SENSOR LH (See page [BC-191](#))**
- 5. DISCONNECT FRONT SPEED SENSOR RH**
HINT:
 Use the same procedures described for the LH side.
- 6. DISCONNECT FRONT DISC BRAKE CYLINDER ASSEMBLY LH (See page [BR-40](#))**
- 7. DISCONNECT FRONT DISC BRAKE CYLINDER ASSEMBLY RH**
HINT:
 Use the same procedures described for the LH side.
- 8. DISCONNECT FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-30](#))**
- 9. DISCONNECT FRONT STABILIZER LINK ASSEMBLY RH**
- 10. DISCONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH (See page [SP-22](#))**
- 11. DISCONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY RH**
HINT:
 Use the same procedures described for the LH side.
- 12. DISCONNECT STEERING KNUCKLE WITH AXLE HUB LH**
 - (a) Put matchmarks on the drive shaft and axle hub.
NOTICE:
Do not punch the marks.
 - (b) Using a plastic-faced hammer, disconnect the steering knuckle with axle hub.
NOTICE:
Be careful not to damage the boot and speed sensor rotor.
Do not excessively push out the drive shaft from the axle assembly.
- 13. DISCONNECT STEERING KNUCKLE WITH AXLE HUB RH**
HINT:
 Use the same procedures described for the LH side.



14. DISCONNECT TIE ROD END SUB-ASSEMBLY LH
(See page [PS-42](#))
15. DISCONNECT TIE ROD END SUB-ASSEMBLY RH
HINT:
Use the same procedures described for the LH side.
16. REMOVE FRONT DRIVE SHAFT ASSEMBLY LH
 - (a) Using SST, remove the front drive shaft.
SST 09520-01010, 09520-24010 (09520-32040)

NOTICE:

 - Be careful not to damage the transaxle case oil seal, inboard joint boot and drive shaft dust cover.
 - Be careful not to drop the drive shaft.

DS

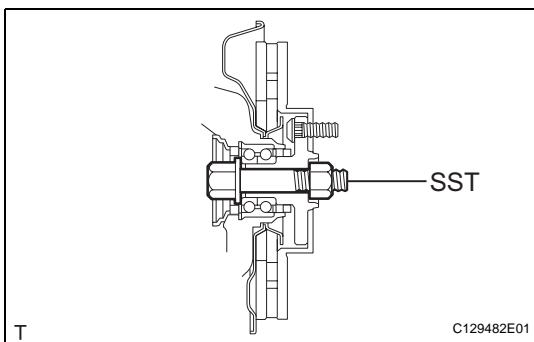
17. REMOVE FRONT DRIVE SHAFT ASSEMBLY RH
 - (a) Squeeze the ends of the snap ring, and remove the snap ring from the bearing bracket.
 - (b) Remove the bearing bracket bolt and remove the front drive shaft from the bearing bracket.

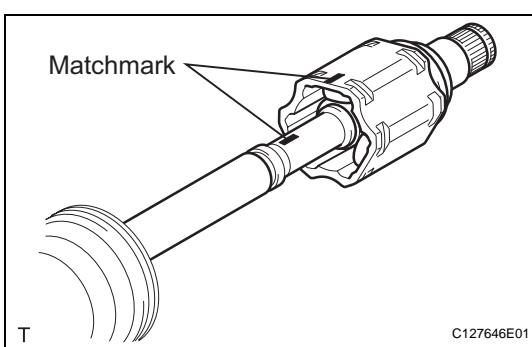
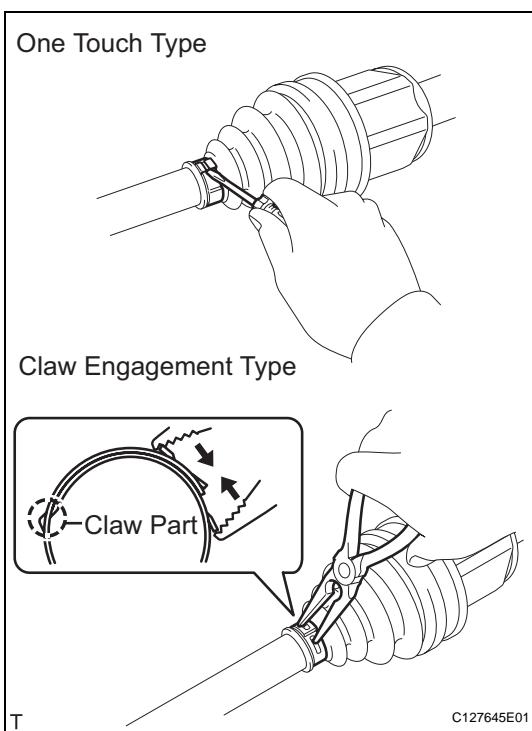
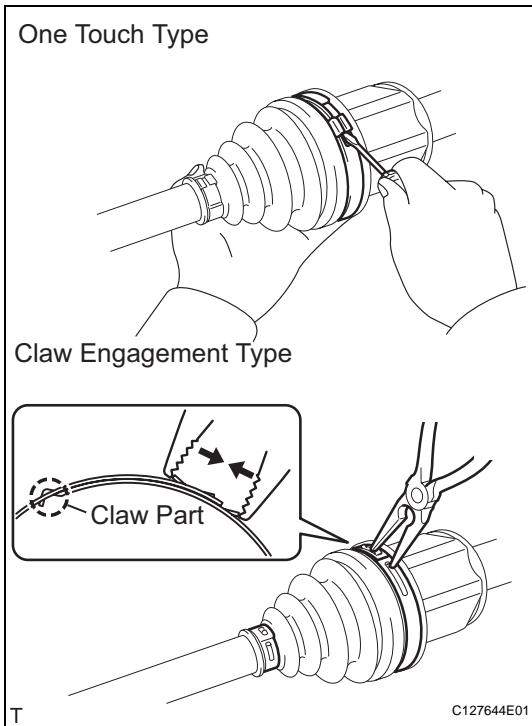
NOTICE:

 - Do not damage the oil seal.
 - Do not damage the boot.
 - Do not allow the drive shaft to fall off.

HINT:
If the connection is stiff, use a brass bar and hammer to lightly tap the edge of the inboard joint RH and remove it.

18. FIX FRONT AXLE ASSEMBLY
NOTICE:
The hub bearing could be damaged if it is subjected to the vehicle weight, such as when moving the vehicle with the drive shaft removed. Therefore, if it is absolutely necessary to place the vehicle weight on the hub bearing, first support it with SST.
SST 09608-16042 (09608-02021, 09608-02041)





DISASSEMBLY

(2005/11-2006/01)

1. REMOVE FRONT AXLE INBOARD JOINT BOOT NO. 2 CLAMP LH

(a) One touch type:

- (1) Using a screwdriver, remove the No. 2 inboard joint boot clamp, as shown in the illustration.

(b) Claw engagement type:

- (1) Using needle-nose pliers, remove the No. 2 inboard joint boot clamp, as shown in the illustration.

2. REMOVE FRONT AXLE INBOARD JOINT BOOT NO. 2 CLAMP RH

HINT:

Using needle-nose pliers, remove the No. 2 inboard joint boot clamp, as shown in the illustration.

3. REMOVE FRONT AXLE INBOARD JOINT BOOT CLAMP LH

(a) One touch type:

- (1) Using a screwdriver, remove the inboard joint boot clamp, as shown in the illustration.

(b) Claw engagement type:

- (1) Using needle-nose pliers, remove the inboard joint boot clamp, as shown in the illustration.

4. REMOVE FRONT AXLE INBOARD JOINT BOOT CLAMP RH

HINT:

Use the same procedures described for the LH side.

5. REMOVE FRONT AXLE INBOARD JOINT BOOT

- (a) Remove the boot from the inboard joint.

6. REMOVE FRONT DRIVE INBOARD JOINT ASSEMBLY LH

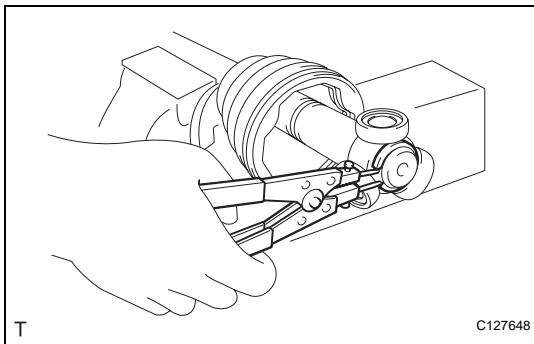
- (a) Remove any old grease from the inboard joint.

- (b) Put matchmarks on the inboard joint and outboard joint shaft.

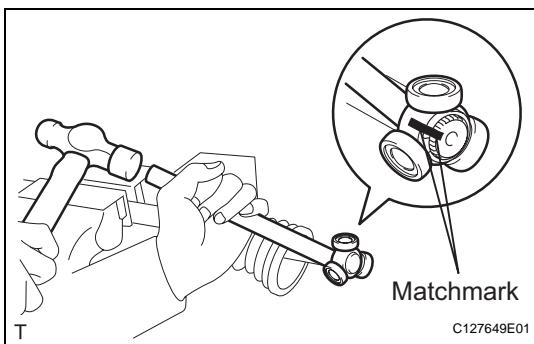
NOTICE:

Do not punch the marks.

- (c) Remove the inboard joint from the outboard joint shaft.



(d) Using a snap ring expander, remove the shaft snap ring.



(e) Put matchmarks on the outboard joint shaft and tripod joint.

NOTICE:

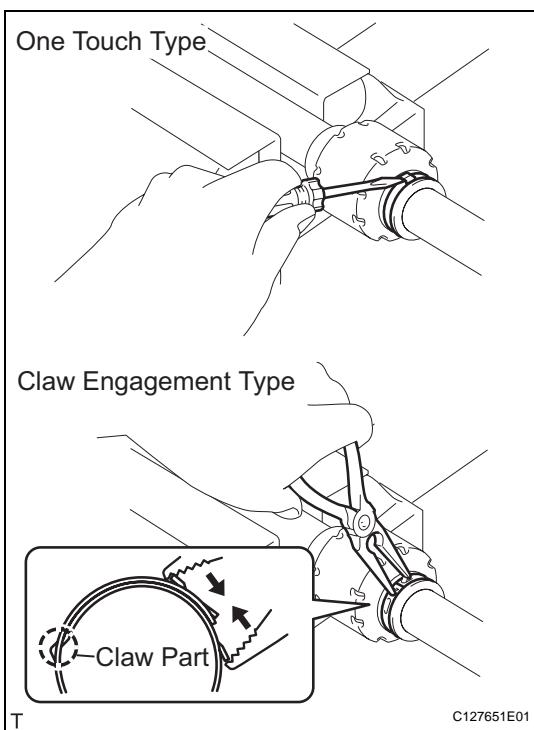
Do not punch the marks.

(f) Using a brass bar and hammer, tap out the tripod joint from the outboard joint shaft.

NOTICE:

Do not tap the rollers.

(g) Remove the inboard joint boot.



7. REMOVE FRONT DRIVE SHAFT DAMPER CLAMP LH

(a) One touch type:

(1) Using a screwdriver, remove the drive shaft damper clamp, as shown in the illustration.

(b) Claw engagement type:

(1) Using needle-nose pliers, remove the drive shaft damper clamp, as shown in the illustration.

8. REMOVE FRONT DRIVE SHAFT DAMPER LH

(a) Remove the front drive shaft damper.

9. REMOVE FRONT DRIVE SHAFT DAMPER CLAMP RH

HINT:

Use the same procedures described for the LH side.

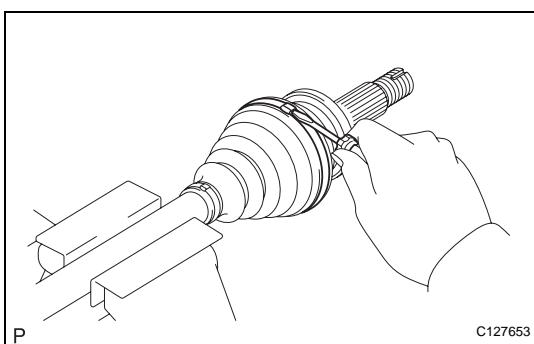
10. REMOVE FRONT DRIVE SHAFT DAMPER RH

HINT:

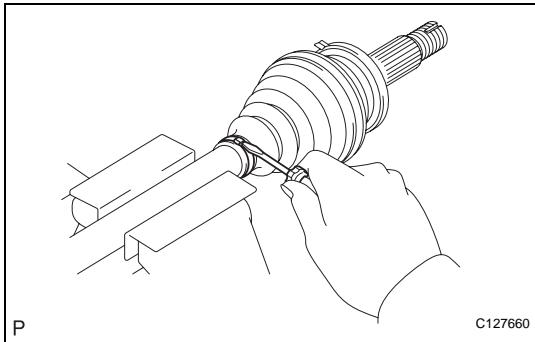
Use the same procedures described for the LH side.

11. REMOVE FRONT AXLE OUTBOARD JOINT BOOT NO. 2 CLAMP LH

(a) Using a screwdriver, remove the No. 2 outboard joint boot clamp, as shown in the illustration.



DS

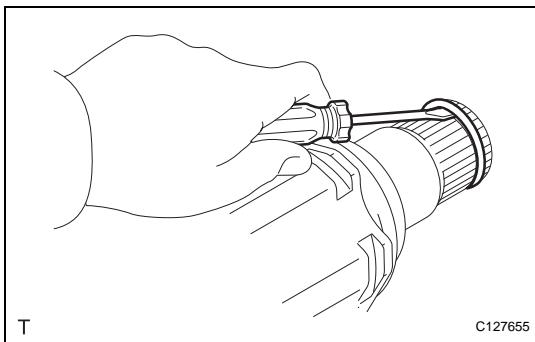


12. REMOVE FRONT AXLE OUTBOARD JOINT BOOT CLAMP LH

- (a) Using a screwdriver, remove the outboard joint boot clamp, as shown in the illustration.

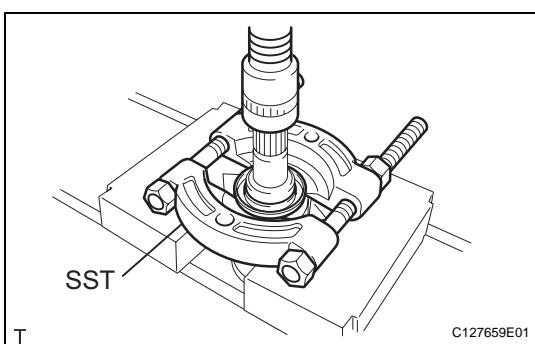
13. REMOVE FRONT AXLE OUTBOARD JOINT BOOT

- (a) Remove the outboard joint boot from the outboard joint shaft.
- (b) Remove any old grease from the outboard joint.



14. REMOVE FRONT DRIVE SHAFT HOLE SNAP RING LH

- (a) Using a screwdriver, remove the hole snap ring.



15. REMOVE FRONT DRIVE SHAFT DUST COVER LH

- (a) Using SST and a press, press out the front drive shaft dust cover.

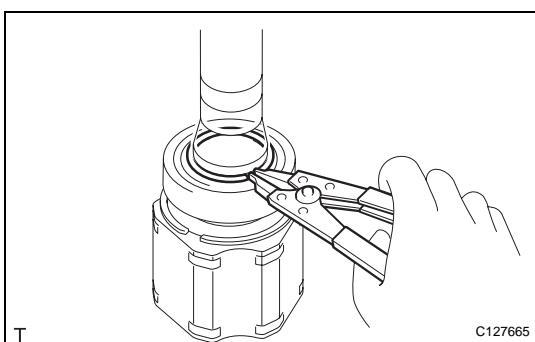
SST 09950-00020

NOTICE:

Be careful not to drop the inboard joint

16. REMOVE FRONT DRIVE SHAFT DUST COVER RH

- (a) Using a press, press out the drive shaft dust cover.



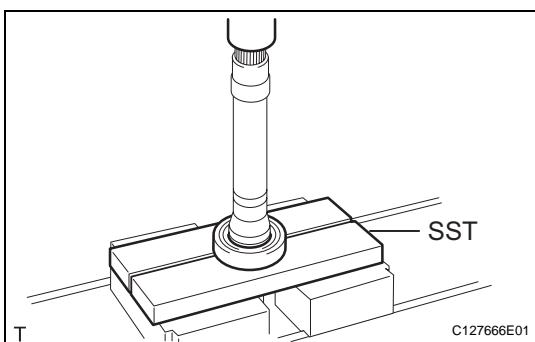
17. REMOVE FRONT DRIVE SHAFT BEARING

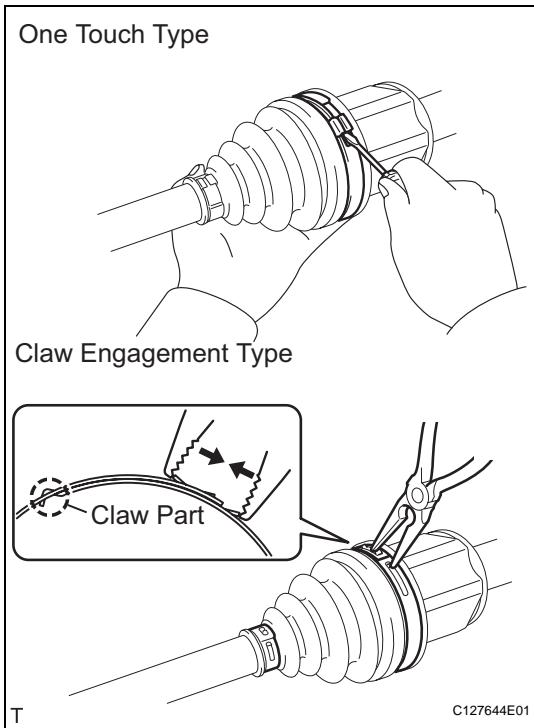
- (a) Using a snap ring expander, remove the drive shaft hole snap ring.

- (b) Using SST and a press, press out the drive shaft bearing.

SST 09527-10011

- (c) Remove the snap ring.





DISASSEMBLY

(2006/01-)

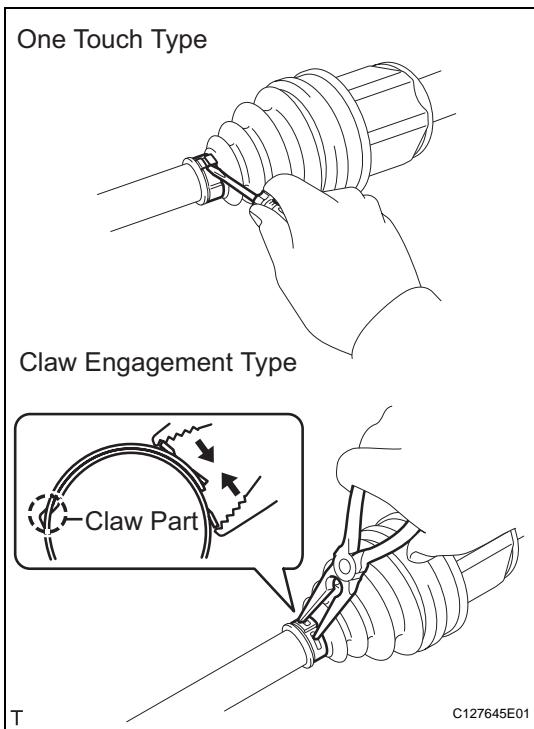
1. REMOVE FRONT AXLE INBOARD JOINT BOOT NO. 2 CLAMP

(a) One touch type:

Using a screwdriver, remove the No. 2 inboard joint boot clamp, as shown in the illustration.

(b) Claw engagement type:

Using needle-nose pliers, remove the No. 2 inboard joint boot clamp, as shown in the illustration.



2. REMOVE FRONT AXLE INBOARD JOINT BOOT CLAMP

(a) One touch type:

Using a screwdriver, remove the inboard joint boot clamp, as shown in the illustration.

(b) Claw engagement type:

Using needle-nose pliers, remove the inboard joint boot clamp, as shown in the illustration.

3. REMOVE FRONT AXLE INBOARD JOINT BOOT

(a) Remove the boot from the inboard joint.

4. REMOVE FRONT DRIVE INBOARD JOINT ASSEMBLY LH

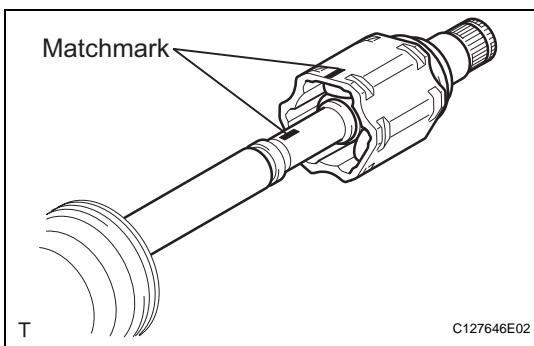
(a) Remove any old grease from the inboard joint.

(b) Put matchmarks on the inboard joint and outboard joint shaft.

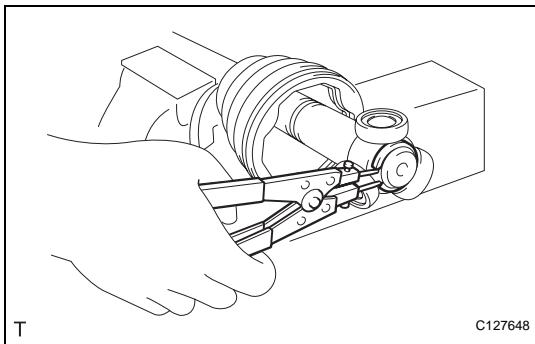
NOTICE:

Do not punch the marks.

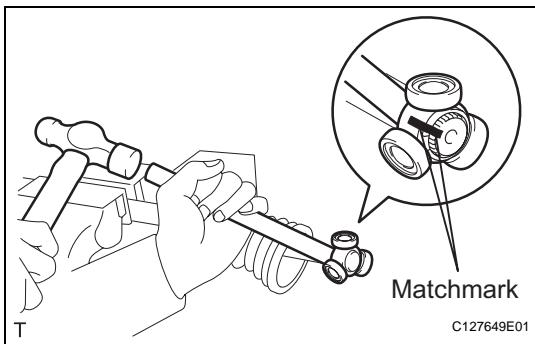
(c) Remove the inboard joint from the outboard joint shaft.



DS



- (d) Using a snap ring expander, remove the shaft snap ring.



- (e) Put matchmarks on the outboard joint shaft and tripod joint.

NOTICE:

Do not punch the marks.

- (f) Using a brass bar and hammer, tap out the tripod joint from the outboard joint shaft.

NOTICE:

Do not tap the rollers.

- (g) Remove the inboard joint boot.

5. REMOVE FRONT DRIVE SHAFT INBOARD JOINT ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

6. REMOVE FRONT DRIVE SHAFT DAMPER CLAMP LH

- (a) One touch type:

Using a screwdriver, remove the drive shaft damper clamp, as shown in the illustration.

- (b) Claw engagement type:

Using needle-nose pliers, remove the drive shaft damper clamp, as shown in the illustration.

7. REMOVE FRONT DRIVE SHAFT DAMPER LH

- (a) Remove the front drive shaft damper.

8. REMOVE FRONT DRIVE SHAFT DAMPER CLAMP RH

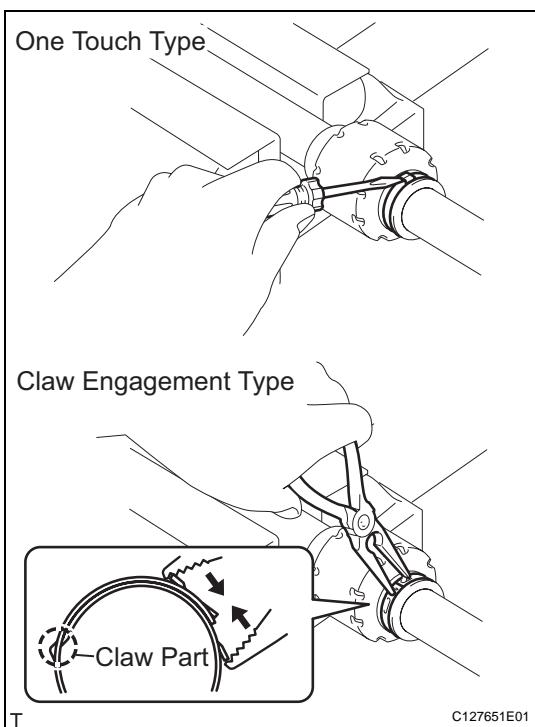
HINT:

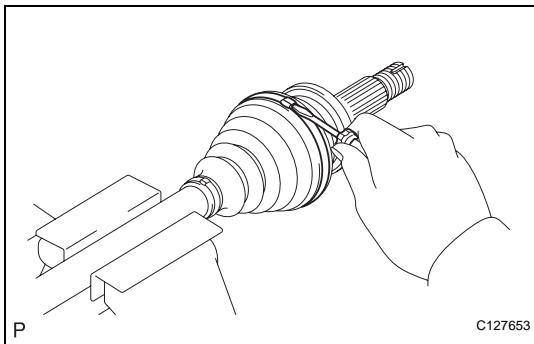
Use the same procedures described for the LH side.

9. REMOVE FRONT DRIVE SHAFT DAMPER RH

HINT:

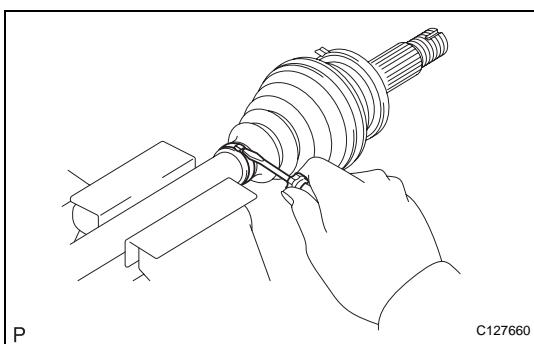
Use the same procedures described for the LH side.





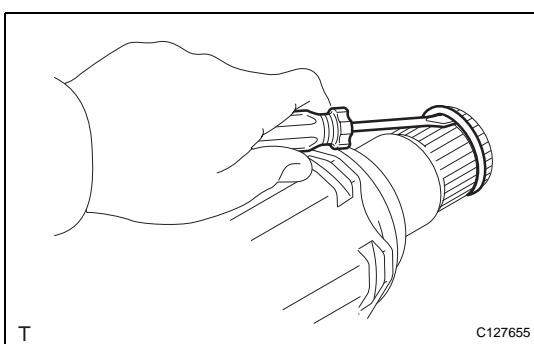
10. REMOVE FRONT AXLE OUTBOARD JOINT BOOT NO. 2 CLAMP

(a) Using a screwdriver, remove the No. 2 outboard joint boot clamp, as shown in the illustration.



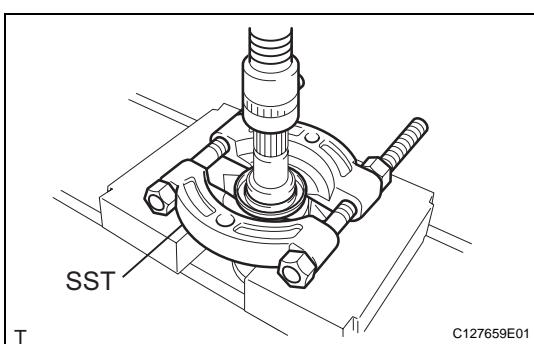
11. REMOVE FRONT AXLE OUTBOARD JOINT BOOT CLAMP

(a) Using a screwdriver, remove the outboard joint boot clamp, as shown in the illustration.



13. REMOVE FRONT DRIVE SHAFT HOLE SNAP RING LH

(a) Using a screwdriver, remove the hole snap ring.



14. REMOVE FRONT DRIVE SHAFT DUST COVER LH

(a) Using SST and a press, press out the front drive shaft dust cover.

SST 09950-00020

NOTICE:

Be careful not to drop the inboard joint.

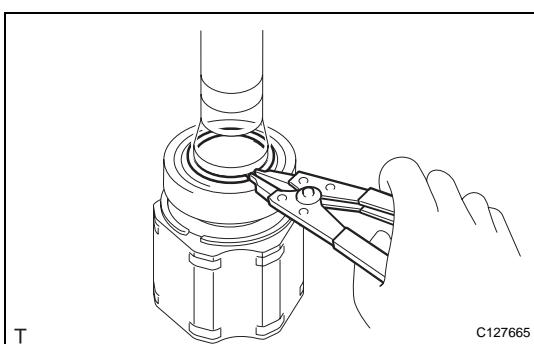
15. REMOVE FRONT DRIVE SHAFT DUST COVER RH

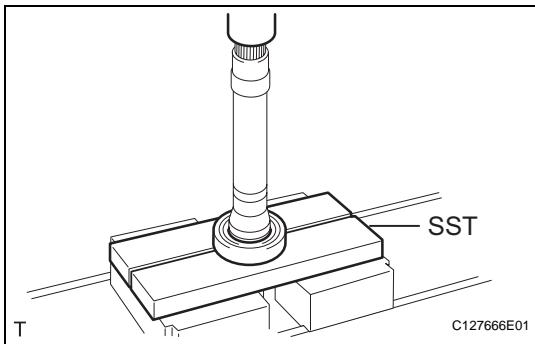
HINT:

Use the same procedures described for the LH side.

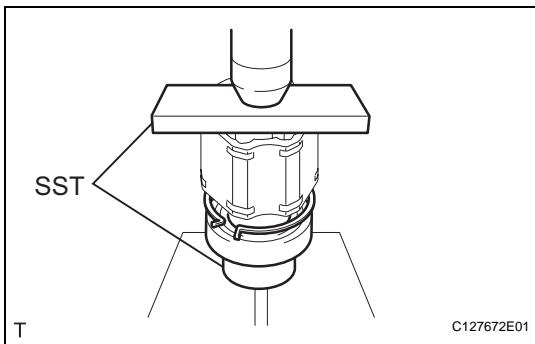
16. REMOVE FRONT DRIVE SHAFT BEARING (for RH)

(a) Using a snap ring expander, remove the drive shaft hole snap ring.





- (b) Using SST and a press, press out the drive shaft bearing.
SST 09527-10011
- (c) Remove the bearing bracket snap ring.



REASSEMBLY

(2005/11-2006/01)

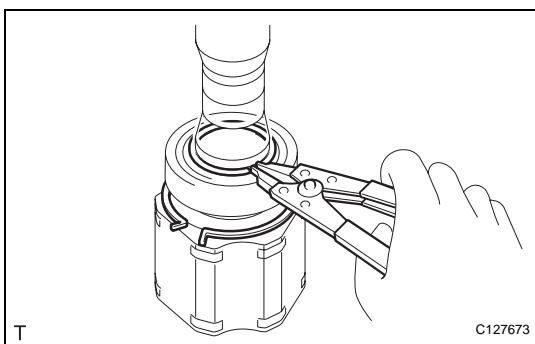
1. INSTALL FRONT DRIVE SHAFT BEARING

- (a) Using SST and a press, press in the drive shaft bearing to the inboard joint RH.

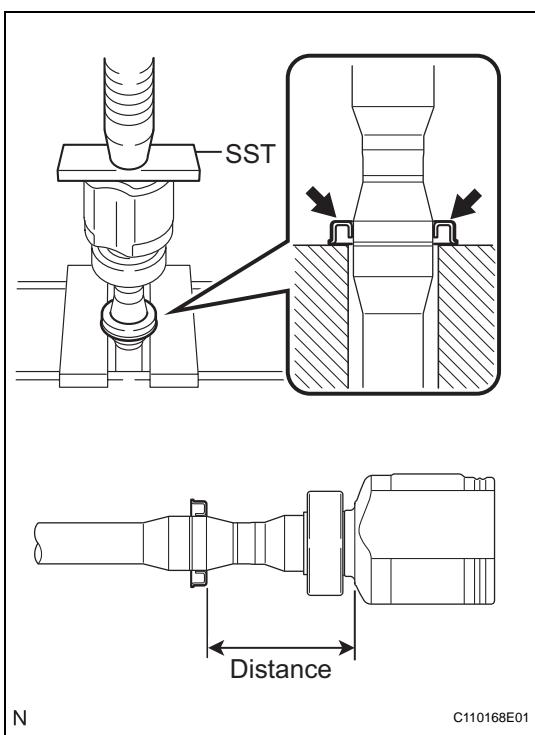
SST 09527-10011, 09710-04081

NOTICE:

The bearing should be installed completely.



- (b) Using a snap ring expander, install a new drive shaft hole snap ring.



2. REMOVE FRONT DRIVE SHAFT DUST COVER RH

- (a) Using SST and a press, press in a new drive shaft dust cover until the distance from the tip of the center drive shaft to the drive shaft dust cover reaches the specification, as shown in the illustration.

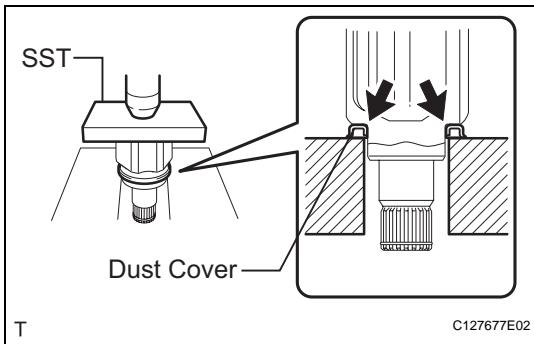
SST 09527-10011

Standard distance:

$104 +0.5 \text{ mm (} 4.09 +0.02 \text{ in.)}$

NOTICE:

- The dust cover should be installed completely.
- Be careful not to damage the dust cover.



3. INSTALL FRONT DRIVE SHAFT DUST COVER LH

(a) Using SST and a press, press in a new drive shaft dust cover.

SST 09527-10011

NOTICE:

- The dust cover should be installed completely.
- Be careful not to damage the dust cover.

4. INSTALL FRONT DRIVE SHAFT HOLE SNAP RING LH

(a) Install a new hole snap ring.

5. INSPECT FRONT DRIVE SHAFT

6. INSTALL FRONT AXLE OUTBOARD JOINT BOOT

HINT:

Before installing the boots, wrap the spline of the drive shaft with vinyl tape to prevent the boots from being damaged.

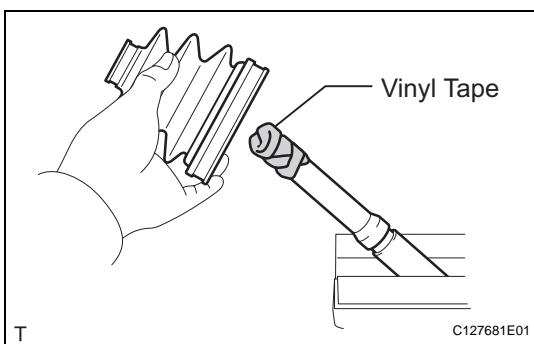
(a) Install new parts to the outboard joint shaft in the following order.

- (1) No. 2 outboard joint boot clamp
- (2) Outboard joint boot
- (3) Outboard joint boot clamp

(b) Pack the outboard joint shaft and boot with grease from the boot kit.

Standard grease capacity:

190 to 200 g (6.7 to 7.1 oz.)



7. INSTALL FRONT AXLE OUTBOARD JOINT BOOT LH NO.2 CLAMP

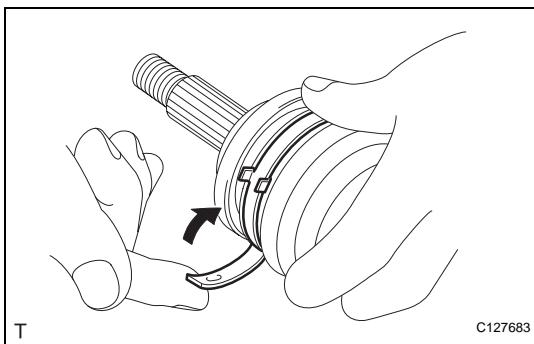
CAUTION:

Wear protective gloves while performing the operation and be careful to avoid cutting your hands or other body parts.

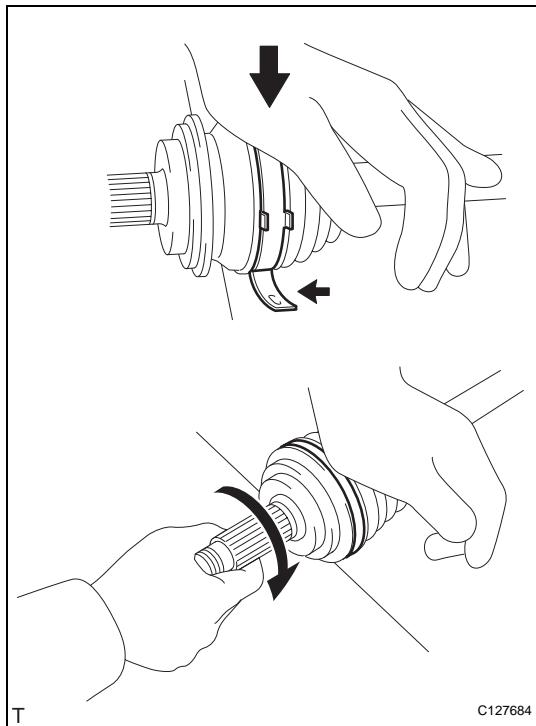
(a) Install a new boot clamp to the outboard joint boot and temporarily bend the lever.

NOTICE:

- When temporarily bending the lever, make sure not to deform the band and lever.
- Set the clamp correctly in the guide groove and align it with the interior of the vehicle as much as possible.



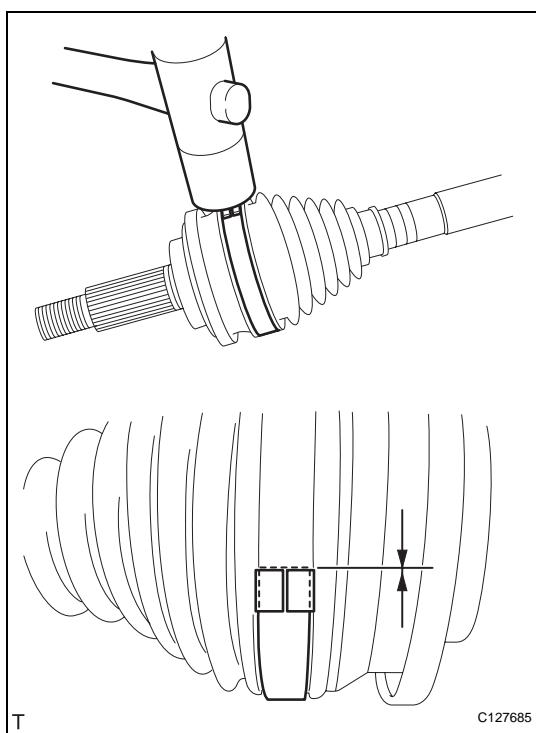
DS



(b) With the joint on the working surface, use your body weight to press down on the joint with one hand. Then, roll the joint forward, as shown in the illustration, and press the lever in until a "click" sound is heard.

NOTICE:

- Do not damage the deflector.
- Make sure the joint is in full contact with the joint surface at all times.

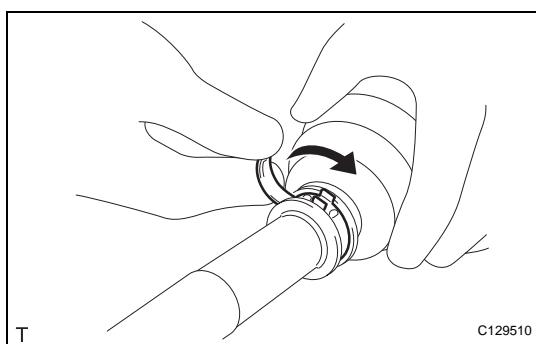


(c) Using a plastic-faced hammer, fix the buckle into place by tapping it. At the same time, use the plastic-faced hammer to adjust the lift of the lever so that the gaps between the buckle flange and lever end flange become even.

8. INSTALL FRONT AXLE OUTBOARD JOINT BOOT NO. 2 CLAMP RH

HINT:

Use the same procedures described for the LH side.



9. INSTALL FRONT AXLE OUTBOARD JOINT BOOT CLAMP LH

CAUTION:

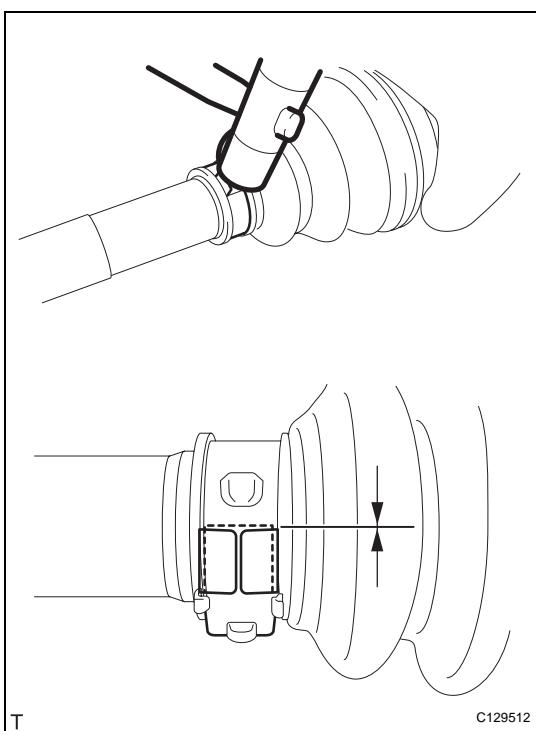
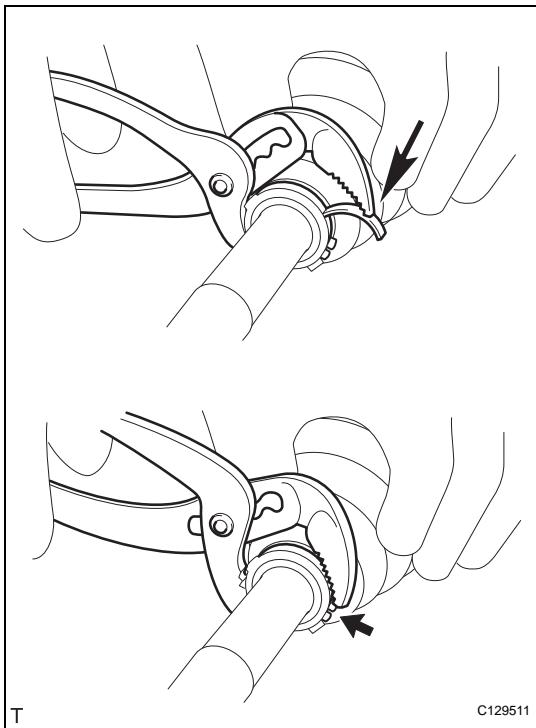
Wear protective gloves while performing the operation and be careful to avoid cutting your hands or other body parts.

(a) Install a new boot clamp to the outboard joint boot and temporarily bend the lever.

NOTICE:

When temporarily bending the lever, make sure not to deform the band and lever.

(b) Using water pump pliers, temporarily lock the boot clamp by clamping it down until a "click" sound is heard.



(c) Using a plastic-faced hammer, fix the buckle into place by tapping it. At the same time, use the plastic-faced hammer to adjust the lift of the lever so that the gaps between the buckle flange and lever end flange become even.

NOTICE:

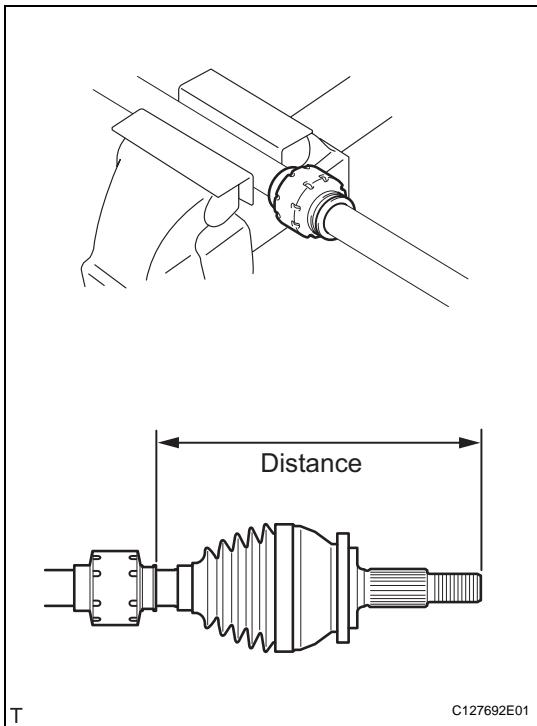
Do not strike the drive shaft forcefully with the plastic-faced hammer.

10. INSTALL FRONT AXLE OUTBOARD JOINT BOOT CLAMP RH

HINT:

Use the same procedures described for the LH side.

DS



11. INSTALL FRONT DRIVE SHAFT DAMPER LH

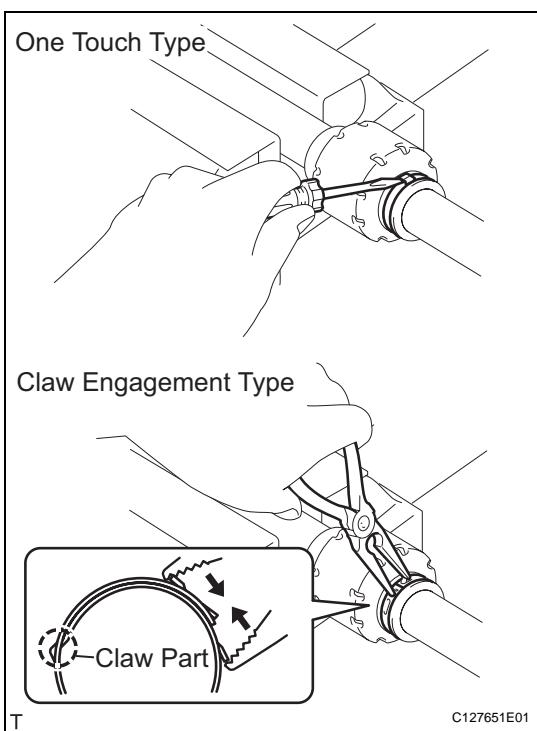
HINT:

Install the damper clamp to the outboard joint side.

- Install a new drive shaft damper clamp and the drive shaft damper to the drive shaft.
- Make sure that the damper is on the shaft groove.
- Set the distance, as described below.

Standard distance:

161 to 165 mm (6.339 to 6.496 in.)



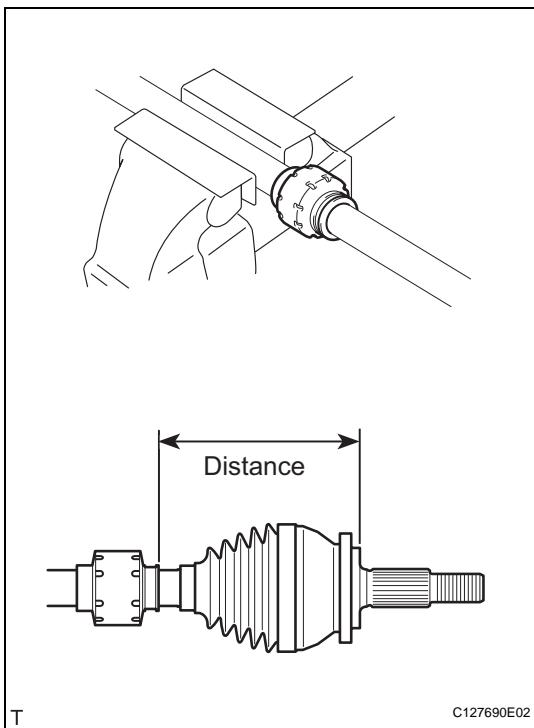
12. INSTALL FRONT DRIVE SHAFT DAMPER CLAMP LH

- Hold the front drive shaft lightly in a soft vise.
- Install the drive shaft damper clamp to the damper.

NOTICE:

Be sure to install the clamp in the correct position.

- One touch type:
 - Using a screwdriver, install the drive shaft damper clamp, as shown in the illustration.
- Claw engagement type:
 - Using needle-nose pliers, install the drive shaft damper clamp, as shown in the illustration.



13. INSTALL FRONT DRIVE SHAFT DAMPER RH

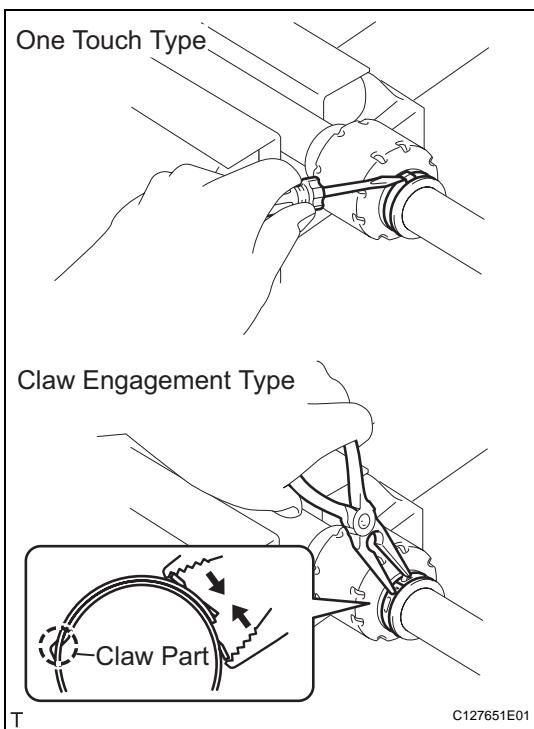
HINT:

Install the damper clamp to outboard joint side.

- Install a new drive shaft damper clamp and the drive shaft damper to the drive shaft.
- Make sure that the damper is on the shaft groove.
- Set the distance, as described below.

Standard distance:

161 to 165 mm (6.339 to 6.496 in.)



14. INSTALL FRONT DRIVE SHAFT DAMPER CLAMP RH

- Hold the front drive shaft lightly in a soft vise.
- Install the drive shaft damper clamp to the damper.

NOTICE:

Be sure to install the clamp in the correct position.

- One touch type:
 - Using a screwdriver, install the drive shaft damper clamp, as shown in the illustration.
- Claw engagement type:
 - Using needle-nose pliers, install the drive shaft damper clamp, as shown in the illustration.

15. INSTALL FRONT DRIVE INBOARD JOINT ASSEMBLY LH

- Wrap the spline of the outboard joint shaft with vinyl tape to prevent the boots from being damaged.

- Install new parts to the outboard joint shaft in the following order.

- Inboard joint boot clamp
- No. 2 inboard joint boot clamp
- Inboard joint boot

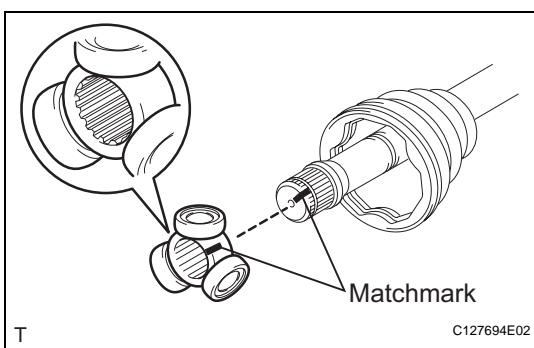
- Place the beveled side of the tripod axial spline toward the outboard joint.

- Align the matchmarks placed before removal.

- Using a brass bar and hammer, tap the tripod joint onto the drive shaft.

NOTICE:

- **Do not tap the rollers.**
- **Be sure to install the tripod joint in the correct direction**



DS

(f) Pack the inboard joint shaft and boot with grease from the boot kit.

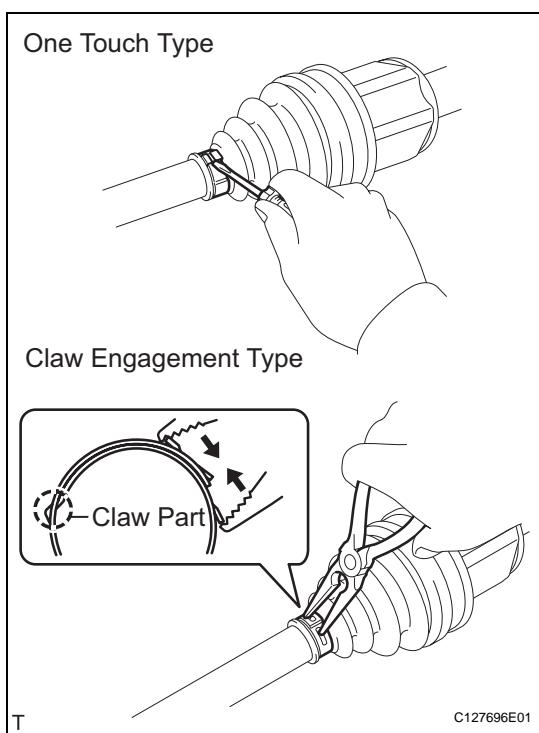
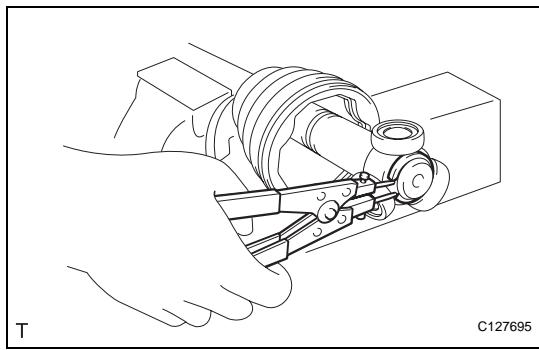
**Standard grease capacity:
175 to 185 g (6.2 to 6.5 oz.)**

(g) Using a snap ring expander, install a new shaft snap ring.
(h) Align the matchmarks, and install the inboard joint to the outboard joint shaft.

16. INSTALL FRONT DRIVE INBOARD JOINT ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.



17. INSTALL FRONT AXLE INBOARD JOINT BOOT

(a) Install the inboard joint boot to the inboard joint.

18. INSTALL FRONT AXLE INBOARD JOINT BOOT CLAMP LH

(a) One touch type:

(1) Using a screwdriver, install the inboard joint boot clamp, as shown in the illustration.

NOTICE:

Be careful not to damage the boot.

(b) Claw engagement type:

(1) Using needle-nose pliers, install the inboard joint boot clamp, as shown in the illustration.

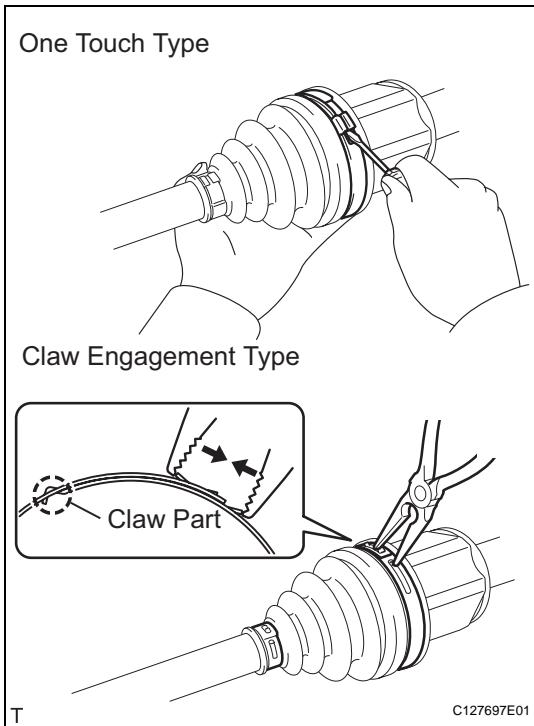
NOTICE:

Be careful not to damage the boot.

19. INSTALL FRONT AXLE INBOARD JOINT BOOT CLAMP RH

HINT:

Use the same procedures described for the LH side.



20. INSTALL FRONT AXLE INBOARD JOINT BOOT NO. 2 CLAMP LH

- (a) One touch type:
 - (1) Using a screwdriver, install the No. 2 inboard joint boot clamp, as shown in the illustration.

NOTICE:
Be careful not to damage the boot.
- (b) Claw engagement type:
 - (1) Using needle-nose pliers, install the No. 2 inboard joint boot clamp, as shown in the illustration.

NOTICE:
Be careful not to damage the boot.

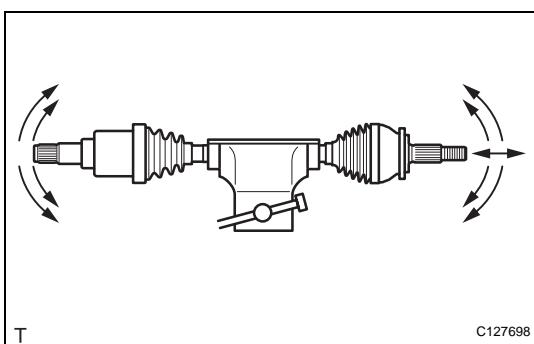
21. INSTALL FRONT AXLE INBOARD JOINT BOOT NO. 2 CLAMP RH

HINT:
Use the same procedures described for the LH side.

DS

22. INSPECT FRONT DRIVE SHAFT

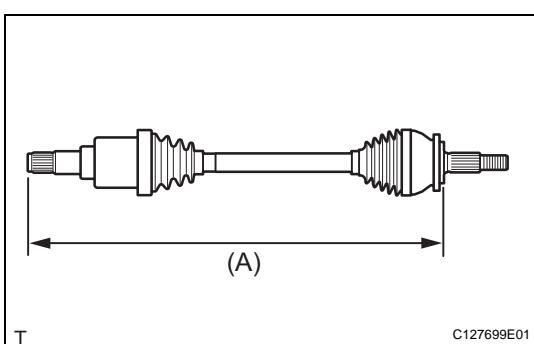
- (a) Check that there is no severe play in the radial direction of the outboard joint.
- (b) Check that the inboard joint slides smoothly in the thrust direction.
- (c) Check that there is no severe play in the radial direction of the inboard joint.



- (d) Check the boots for damage.

NOTICE:
Keep the drive shaft assembly level during inspection.

HINT:
For dimension (A), refer to the following values.
Reference value:
572.5 mm (22.539 in.) for LH side
918 mm (36.142 in.) for RH side



REASSEMBLY

(2006/01-)

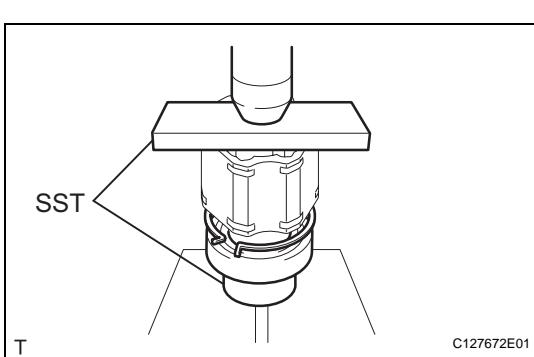
1. INSTALL FRONT DRIVE SHAFT BEARING (for RH)

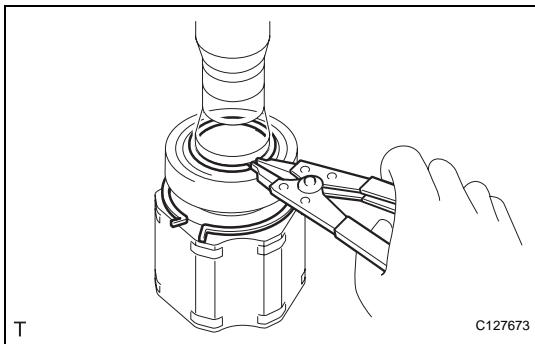
- (a) Install the bearing bracket snap ring to the inboard shaft.
- (b) Using SST and a press, press in the drive shaft bearing to the inboard joint RH.

SST 09527-10011, 09710-04081

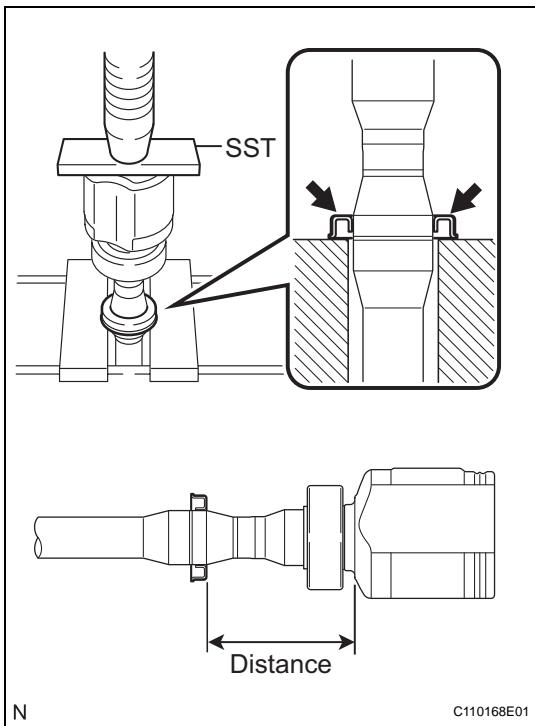
NOTICE:

The bearing should be installed completely.





(c) Using a snap ring expander, install a new drive shaft hole snap ring.



2. REMOVE FRONT DRIVE SHAFT DUST COVER RH

(a) Using SST and a press, press in a new drive shaft dust cover until the distance from the tip of the center drive shaft to the drive shaft dust cover reaches the specification, as shown in the illustration.

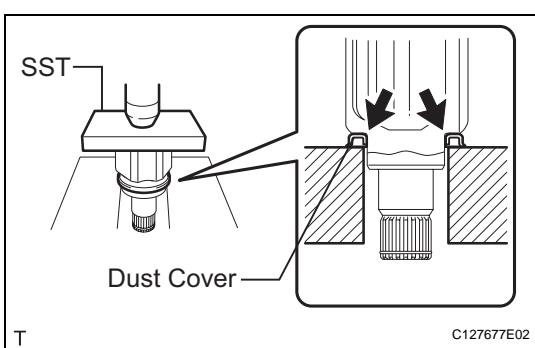
SST 09527-10011

Standard distance:

$104 +0.5 \text{ mm (} 4.09 +0.02 \text{ in.)}$

NOTICE:

Be careful not to damage the dust cover.



3. INSTALL FRONT DRIVE SHAFT DUST COVER LH

(a) Using SST and a press, press in a new drive shaft dust cover.

SST 09527-10011

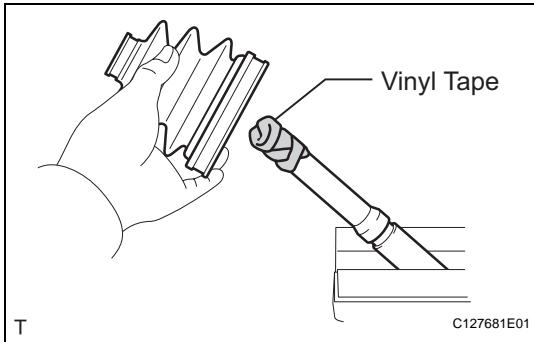
NOTICE:

- The dust cover should be installed so that the drive shaft contacts the dust cover at the location indicated by the arrows in the illustration.
- Be careful not to damage the dust cover.

4. INSTALL FRONT DRIVE SHAFT HOLE SNAP RING LH

(a) Install a new hole snap ring.

5. INSPECT FRONT DRIVE SHAFT



6. INSTALL FRONT AXLE OUTBOARD JOINT BOOT

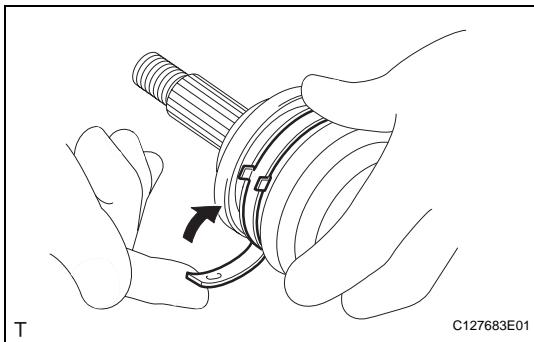
HINT:

Before installing the boots, wrap the spline of the drive shaft with vinyl tape to prevent the boots from being damaged.

- Install new parts to the outboard joint shaft in the following order.
 - Outboard joint boot No. 2 clamp
 - Outboard joint boot
 - Outboard joint boot clamp
- Pack the outboard joint shaft and boot with grease from the boot kit.

Standard grease capacity

Item	Grease capacity
2AZ-FE	190 to 200 g (6.7 to 7.1 oz.)
2GR-FE	205 to 215 g (7.2 to 7.6 oz.)



7. INSTALL FRONT AXLE OUTBOARD JOINT BOOT NO. 2 CLAMP

CAUTION:

Wear protective gloves while performing the operation and be careful to avoid cutting your hands or other body parts.

- Install a new boot clamp to the outboard joint boot and temporarily bend the lever.

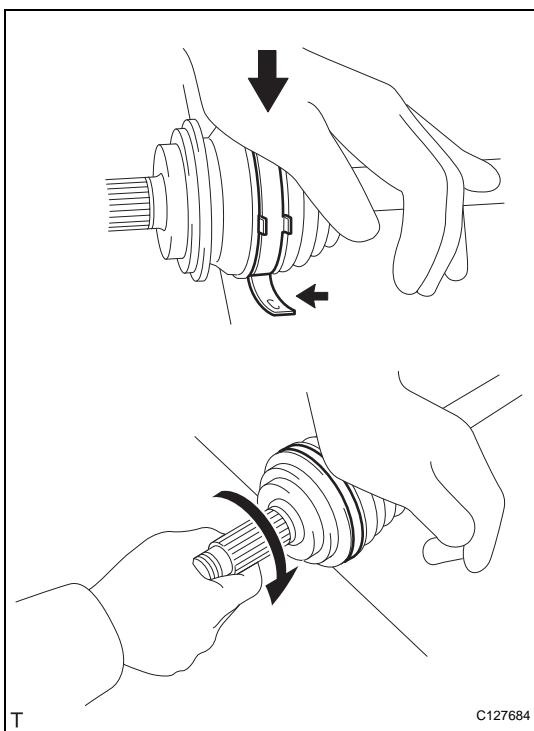
NOTICE:

- When temporarily bending the lever, make sure not to deform the band and lever.
- Set the clamp correctly in the guide groove and align it with the interior of the vehicle as much as possible.

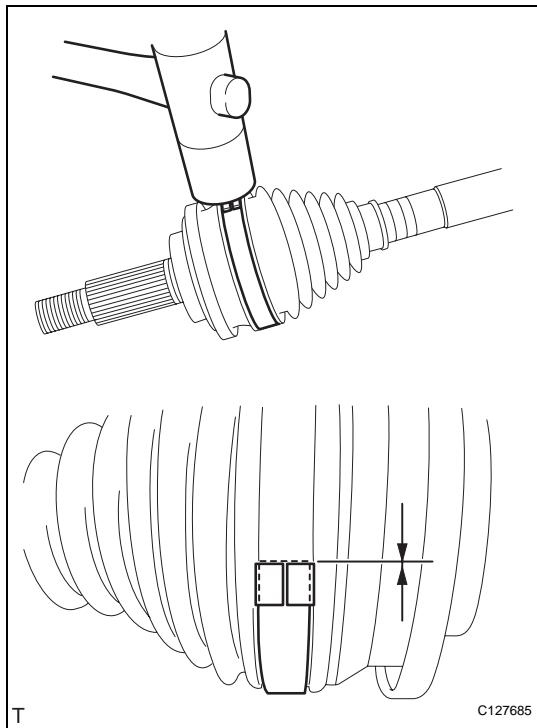
- With the joint on the working surface, use your body weight to press down on the joint with one hand. Then, roll the joint forward, as shown in the illustration, and press the lever in until a "click" sound is heard.

NOTICE:

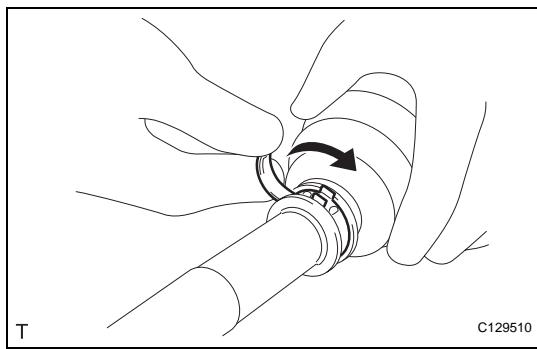
- Do not damage the deflector.
- Make sure the joint is in full contact with the joint surface at all times.



DS



(c) Using a plastic-faced hammer, fix the buckle into place by tapping it. At the same time, use the plastic-faced hammer to adjust the lift of the lever so that the gaps between the buckle flange and lever end flange become even.



8. INSTALL FRONT AXLE OUTBOARD JOINT BOOT CLAMP

CAUTION:

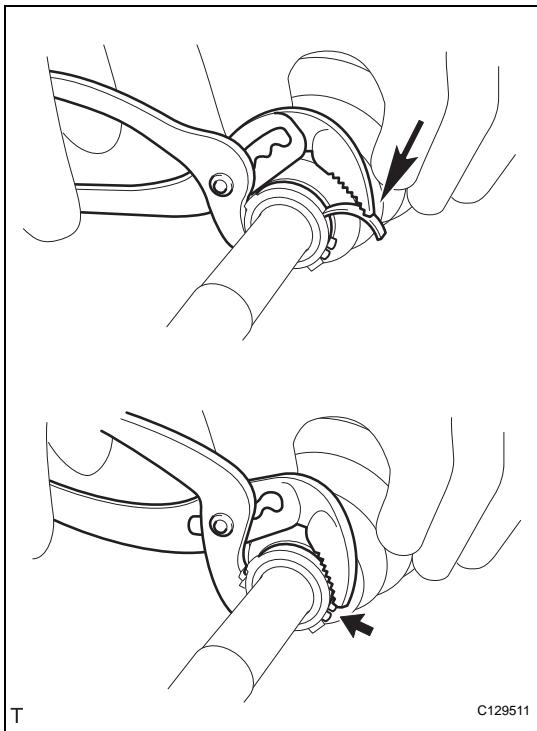
Wear protective gloves while performing the operation and be careful to avoid cutting your hands or other body parts.

(a) Install a new boot clamp to the outboard joint boot and temporarily bend the lever.

NOTICE:

When temporarily bending the lever, make sure not to deform the band and lever.

(b) Using water pump pliers, temporarily lock the boot clamp by clamping it down until a "click" sound is heard.

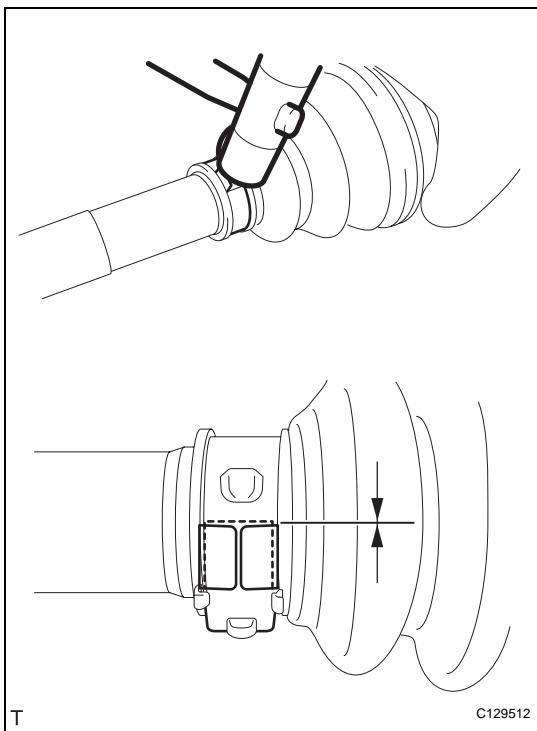


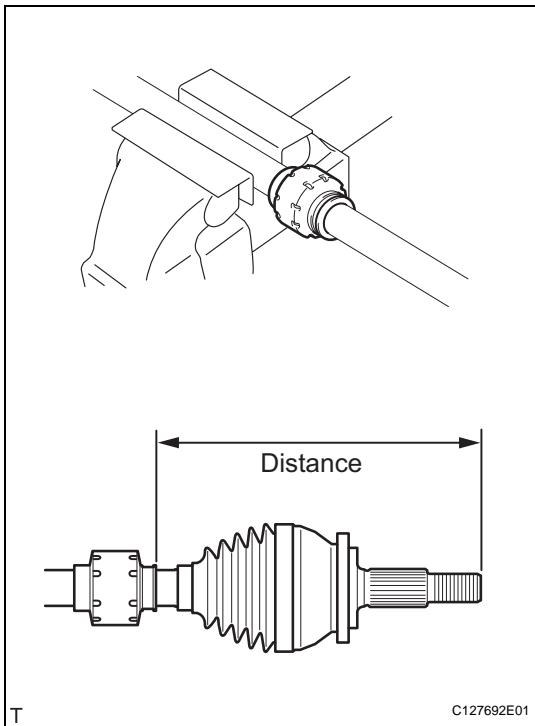
DS

(c) Using a plastic-faced hammer, fix the buckle into place by tapping it. At the same time, use the plastic-faced hammer to adjust the lift of the lever so that the gaps between the buckle flange and lever end flange become even.

NOTICE:

Do not strike the drive shaft forcefully with the plastic-faced hammer.





9. INSTALL FRONT DRIVE SHAFT DAMPER LH

- (a) Install a new drive shaft damper clamp and the drive shaft damper to the drive shaft.

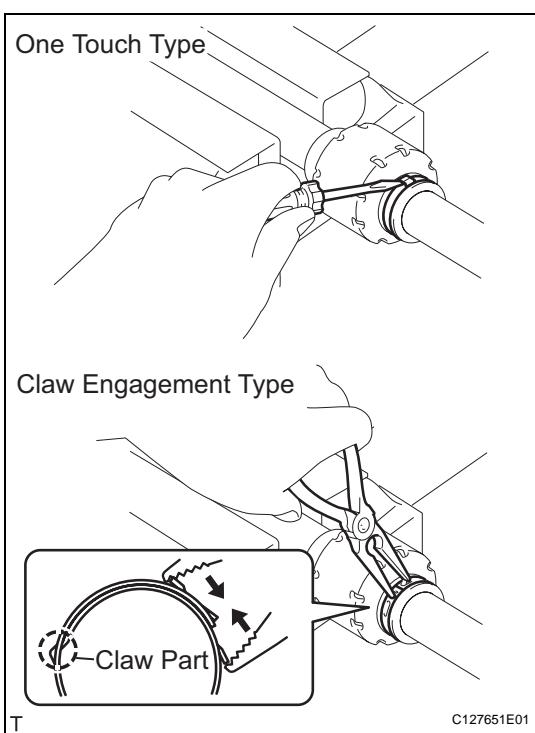
HINT:

Install the damper clamp to the outboard joint side.

- (b) Set the distance, as described below.

Standard distance:

161 to 165 mm (6.339 to 6.496 in.)



10. INSTALL FRONT DRIVE SHAFT DAMPER CLAMP LH

- (a) Hold the front drive shaft lightly in a soft vise.
- (b) Install the drive shaft damper clamp to the damper.

NOTICE:

Be sure to install the clamp in the correct position.

- (c) One touch type:
Using a screwdriver, install the drive shaft damper clamp, as shown in the illustration.
- (d) Claw engagement type:
Using needle-nose pliers, install the drive shaft damper clamp, as shown in the illustration.

11. INSTALL FRONT DRIVE SHAFT DAMPER RH

HINT:

Use the same procedures described for the LH side.

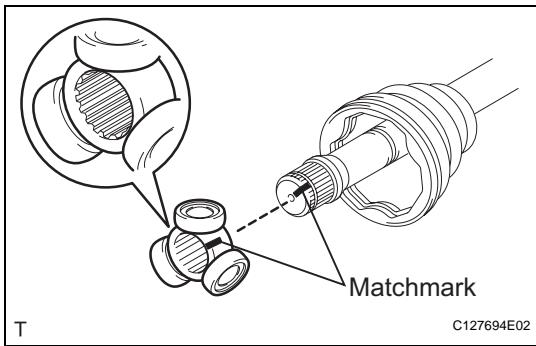
12. INSTALL FRONT DRIVE SHAFT DAMPER CLAMP RH

HINT:

Use the same procedures described for the LH side.

13. INSTALL FRONT DRIVE INBOARD JOINT ASSEMBLY LH

- (a) Wrap the spline of the outboard joint shaft with vinyl tape to prevent the boots from being damaged.
- (b) Install new parts to the outboard joint shaft in the following order.
 - (1) Inboard joint boot clamp
 - (2) Inboard joint boot No. 2 clamp
 - (3) Inboard joint boot



- (c) Place the beveled side of the tripod axial spline toward the outboard joint.
- (d) Align the matchmarks placed before removal.
- (e) Using a brass bar and hammer, tap the tripod joint onto the drive shaft.

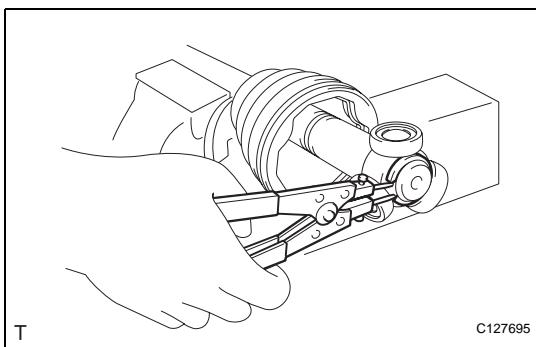
NOTICE:

- **Do not tap the rollers.**
- **Be sure to install the tripod joint in the correct direction.**

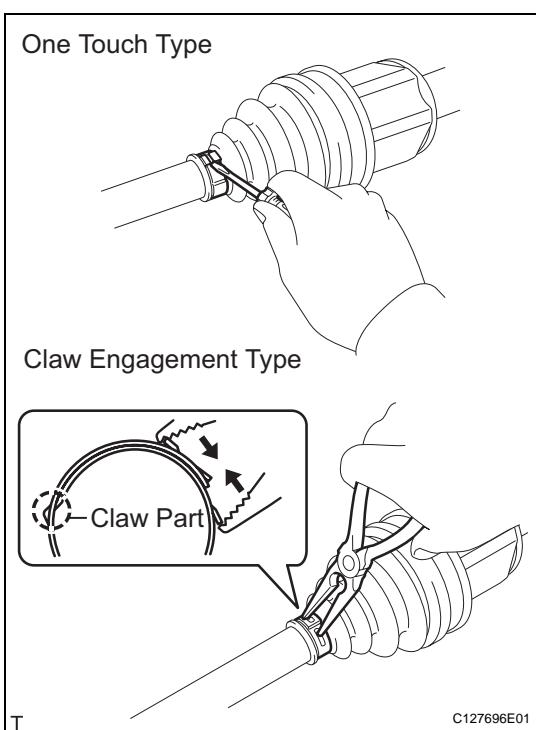
- (f) Pack the inboard joint shaft and boot with grease from the boot kit.

Standard grease capacity:

175 to 185 g (6.2 to 6.5 oz.)



- (g) Using a snap ring expander, install a new shaft snap ring.
- (h) Align the matchmarks, and install the inboard joint to the outboard joint shaft.

**14. INSTALL FRONT DRIVE INBOARD JOINT ASSEMBLY RH****HINT:**

Use the same procedures described for the LH side.

15. INSTALL FRONT AXLE INBOARD JOINT BOOT

- (a) Install the inboard joint boot to the inboard joint.

16. INSTALL FRONT AXLE INBOARD JOINT BOOT CLAMP

- (a) One touch type:
Using a screwdriver, install the inboard joint boot clamp, as shown in the illustration.

NOTICE:

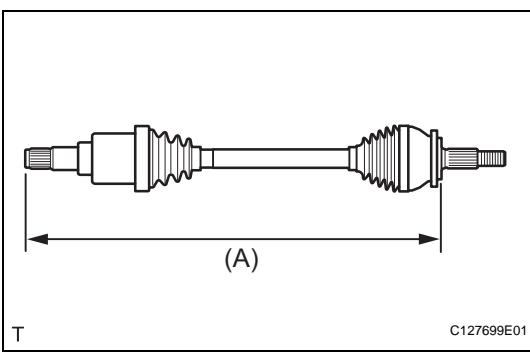
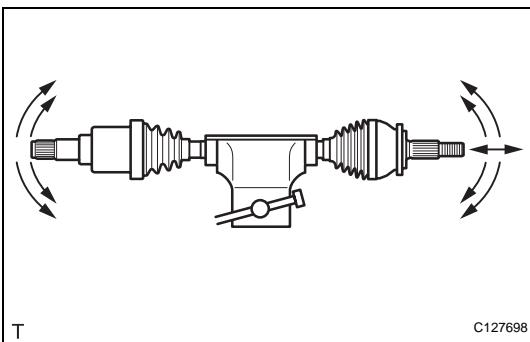
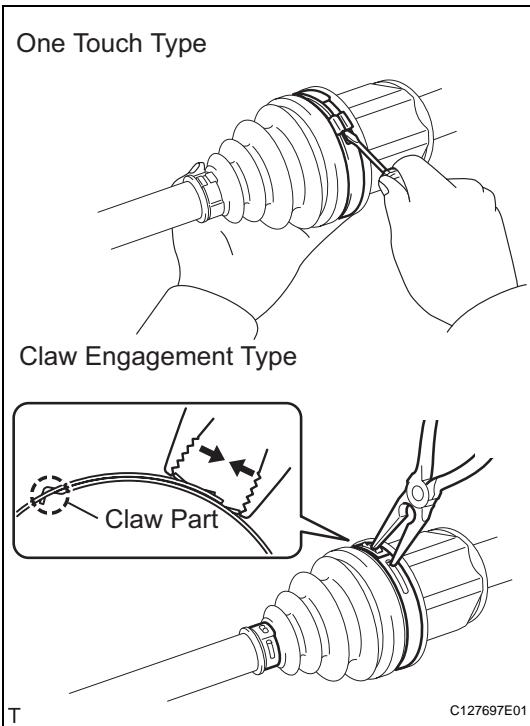
Be careful not to damage the boot.

- (b) Claw engagement type:
Using needle-nose pliers, install the inboard joint boot clamp, as shown in the illustration.

NOTICE:

Be careful not to damage the boot.

DS



17. INSTALL FRONT AXLE INBOARD JOINT BOOT NO. 2 CLAMP

(a) One touch type:

Using a screwdriver, install the No. 2 inboard joint boot clamp, as shown in the illustration.

NOTICE:

Be careful not to damage the boot.

(b) Claw engagement type:

Using needle-nose pliers, install the No. 2 inboard joint boot clamp, as shown in the illustration.

NOTICE:

Be careful not to damage the boot.

18. INSPECT FRONT DRIVE SHAFT

(a) Check that there is no severe play in the radial direction of the outboard joint.

(b) Check that the inboard joint slides smoothly in the thrust direction.

(c) Check that there is no severe play in the radial direction of the inboard joint.

(d) Check the boots for damage.

NOTICE:

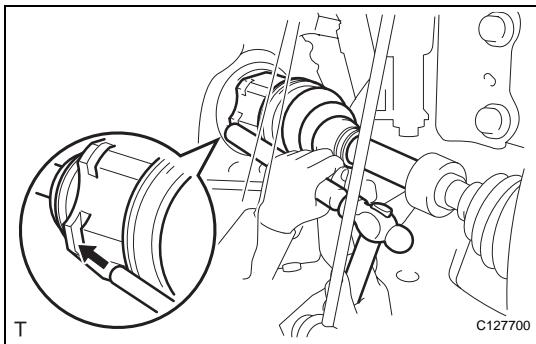
Keep the drive shaft assembly level during inspection.

HINT:

For dimension (A), refer to the following values.

Standard reference value

Item	Drive shaft LH (Dimension)	Drive shaft RH (Dimension)
2AZ-FE	585.2 mm (23.039 in.)	893.9 mm (35.193 in.)
2GR-FE	570.9 mm (22.476 in.)	922.4 mm (36.315 in.)



INSTALLATION

(2005/11-2006/01)

1. INSTALL FRONT DRIVE SHAFT ASSEMBLY LH

- Coat the spline of the inboard joint shaft with gear oil.
- Using a brass bar and hammer, align the shaft splines in the drive shaft.

NOTICE:

- Set the snap ring with the opening side facing downwards.
- Be careful not to damage the oil seal, boot and dust cover.

2. INSTALL FRONT DRIVE SHAFT ASSEMBLY RH

- Coat the spline of the inboard joint shaft with gear oil.
- Align the shaft splines and securely insert the drive shaft.

NOTICE:

Do not damage the oil seal.

- Squeeze the ends of the bracket hole snap ring and install it to the bearing bracket.
- Install the bearing bracket bolt
Torque: 32.4 N*m (330 kgf*cm, 24 ft.*lbf)

3. CONNECT STEERING KNUCKLE WITH AXLE HUB LH

- Align the shaft splines in the drive shaft to the steering knuckle with axle hub.

4. CONNECT STEERING KNUCKLE WITH AXLE HUB RH

HINT:

Use the same procedures described for LH side.

5. CONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH (See page [AH-10](#))

6. CONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY RH

HINT:

Use the same procedures described for LH side.

7. INSTALL FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-31](#))

8. INSTALL FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Use the same procedures described for LH side.

9. INSTALL TIE ROD END SUB-ASSEMBLY LH (See page [PS-45](#))

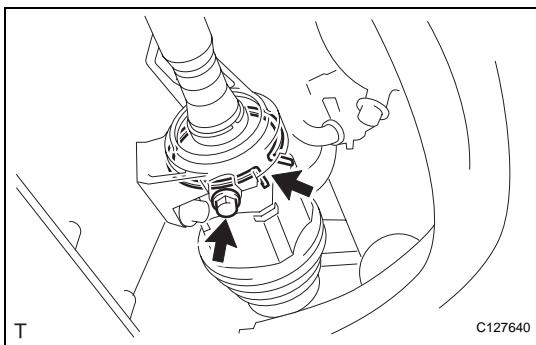
10. INSTALL TIE ROD END SUB-ASSEMBLY RH

HINT:

Use the same procedures described for LH side.

11. CONNECT FRONT SPEED SENSOR LH

- Connect the speed sensor (see page [BC-193](#)).



DS

12. CONNECT FRONT SPEED SENSOR RH**HINT:**

Use the same procedures described for the LH side.

13. INSTALL FRONT AXLE HUB NUT (See page AH-10)**14. INSTALL FRONT WHEEL****Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)****15. ADD AUTOMATIC TRANSAXLE FLUID**(a) Add automatic transaxle fluid for U140F (see page [AX-152](#)).(b) Add automatic transaxle fluid for U241E (see page [AX-151](#)).**16. CHECK FOR AUTOMATIC TRANSAXLE FLUID LEAKAGE****17. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT**(a) Inspect and adjust front wheel alignment (see page [SP-3](#)).**INSTALLATION**

(2006/01-)

1. INSTALL FRONT DRIVE SHAFT ASSEMBLY LH

(a) Coat the spline of the inboard joint shaft with gear oil.

(b) Align the shaft splines and tap in the drive shaft with a brass bar and hammer.

NOTICE:

- Set the snap ring with the opening side facing downwards.
- Be careful not to damage the oil seal, boot and dust cover.

2. INSTALL FRONT DRIVE SHAFT ASSEMBLY RH

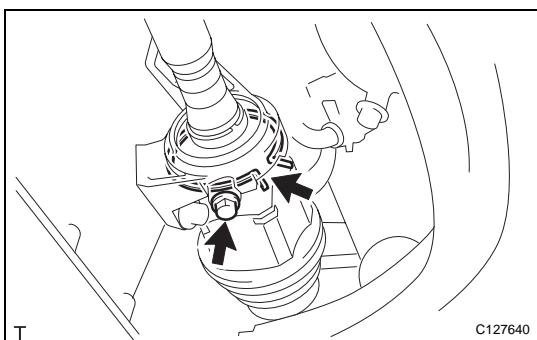
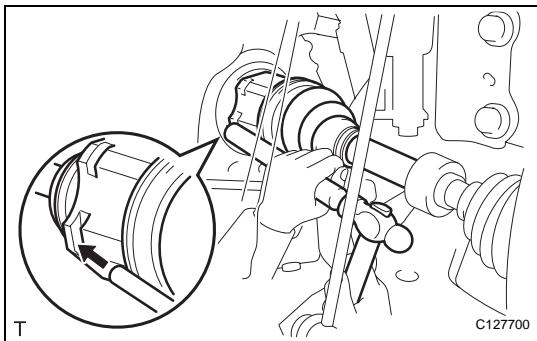
(a) Coat the spline of the inboard joint shaft with gear oil.

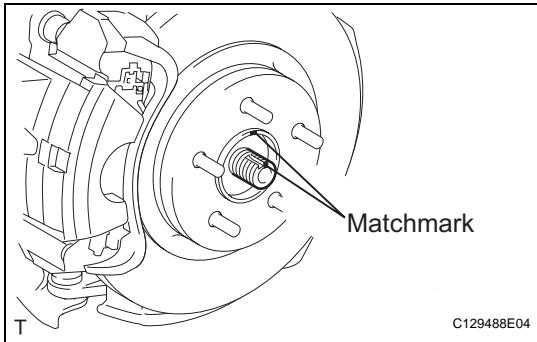
(b) Align the shaft splines and securely insert the drive shaft.

NOTICE:**Do not damage the oil seal.**

(c) Squeeze the ends of the bracket hole snap ring and install it to the bearing bracket.

(d) Install the bearing bracket bolt.

Torque: 32.4 N*m (330 kgf*cm, 24 ft.*lbf)



- 3. CONNECT STEERING KNUCKLE WITH AXLE HUB LH**
 - (a) Align the shaft splines in the drive shaft to the steering knuckle with axle hub, and connect the steering knuckle with axle hub.
- 4. CONNECT STEERING KNUCKLE WITH AXLE HUB RH**

HINT:
Use the same procedures described for the LH side.
- 5. CONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH (See page [SP-24](#))**
- 6. CONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY RH**

HINT:
Use the same procedures described for the LH side.
- 7. INSTALL FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-31](#))**
- 8. INSTALL FRONT STABILIZER LINK ASSEMBLY RH**

HINT:
Use the same procedures described for the LH side.
- 9. INSTALL TIE ROD END SUB-ASSEMBLY LH (See page [PS-45](#))**
- 10. INSTALL TIE ROD END SUB-ASSEMBLY RH**

HINT:
Use the same procedures described for the LH side.
- 11. CONNECT FRONT SPEED SENSOR LH**
 - (a) Connect the speed sensor (see page [BC-193](#)).
- 12. CONNECT FRONT SPEED SENSOR RH**

HINT:
Use the same procedures described for the LH side.
- 13. INSTALL FRONT AXLE HUB NUT (See page [AH-11](#))**
- 14. INSTALL FRONT WHEEL**

Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
- 15. ADD AUTOMATIC TRANSAXLE FLUID**
 - (a) Add automatic transaxle fluid for U140F (see page [AX-152](#)).
 - (b) Add automatic transaxle fluid for U241E (see page [AX-151](#)).
 - (c) Add automatic transaxle fluid for U151F (see page [AX-178](#)).
- 16. CHECK FOR AUTOMATIC TRANSAXLE FLUID LEAKAGE**
- 17. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT**
 - (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

DS